



BMW Bavaria 3.0S





BMW 3-Liter Series

BMW Bavaria

Total efficiency in a fine car. In performance, in handling, in roadholding, in size, in fuel mileage.

BMW 3.0S

Superb engineering, plus every luxury feature imaginable. The ultimate in road travel.



Concept

Today's driving conditions and energy requirements have revolutionized the idea of what a fine car should be.

Luxury per se is no longer enough. There must be far greater efficiency. In every aspect of the car's function.

It must be capable of brilliant performance. Yet it must deliver excellent fuel mileage.

It must offer superior roadholding. At any speed.

It must be comfortable. So as to reduce fatigue, and to minimize unnecessary driver movement. Not merely be soft and roomy.

It must achieve higher standards of safety. In active safety, to avoid accidents. And in passive safety, to survive them.

In sum, it must be a product of the highest engineering refinement.

At Germany's famed Bavarian Motor Works, we have led the way in building cars based upon this kind of innovative thinking since 1916.

Now, in producing our latest 3-liter series, we have reached a new pinnacle.

See these cars. Drive them. When you do, we think you will agree with many of the world's automotive experts, who have acclaimed them not merely good cars, but great ones.









Styling

Above all else, the 3-liter BMW is meant to be driven. To carry its occupants quickly from one point to another in comfort and in safety. And thus the car's styling is a concise expression of its purpose.

It is low. Which increases stability and contributes to its roadholding capabilities.

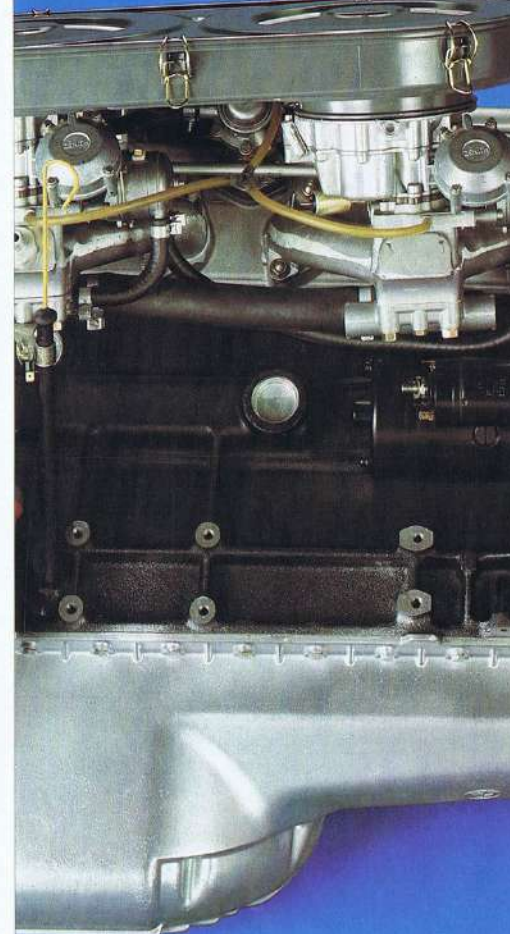
It is not overly long. Which makes for better handling, and for greater agility in traffic. And also allows easier parking.

It is spacious. Despite its clean, taut lines, the BMW provides more interior room than many far larger cars. And more luggage space in its ample trunk.

It permits excellent outward visibility. Which results from its low beltline and its generous use of glass. The slope of the hood also gives the driver an unusually good view of the road.

In total, the car's appearance says, here is remarkable efficiency in space engineering.

And at the same time it says, here is power and speed and roadability. Here is the car for the man who knows and appreciates great machinery. The man who truly loves to drive.





Powerplant

The new 3-liter BMW has been called the most sophisticated 6-cylinder engine in the world.

Performance is outstanding. Turbine-smooth at any speed. With great reserves at the driver's command for any situation.

170 horsepower. 185 foot-pounds of torque. 0 to 60 mph in 9.4 seconds. Top speed 120 mph.

Triple-hemispherical, swirl-action combustion chambers permit more complete burning of the fuel-air mixture. The result is maximal power output, cleaner emissions, and greater fuel mileage.

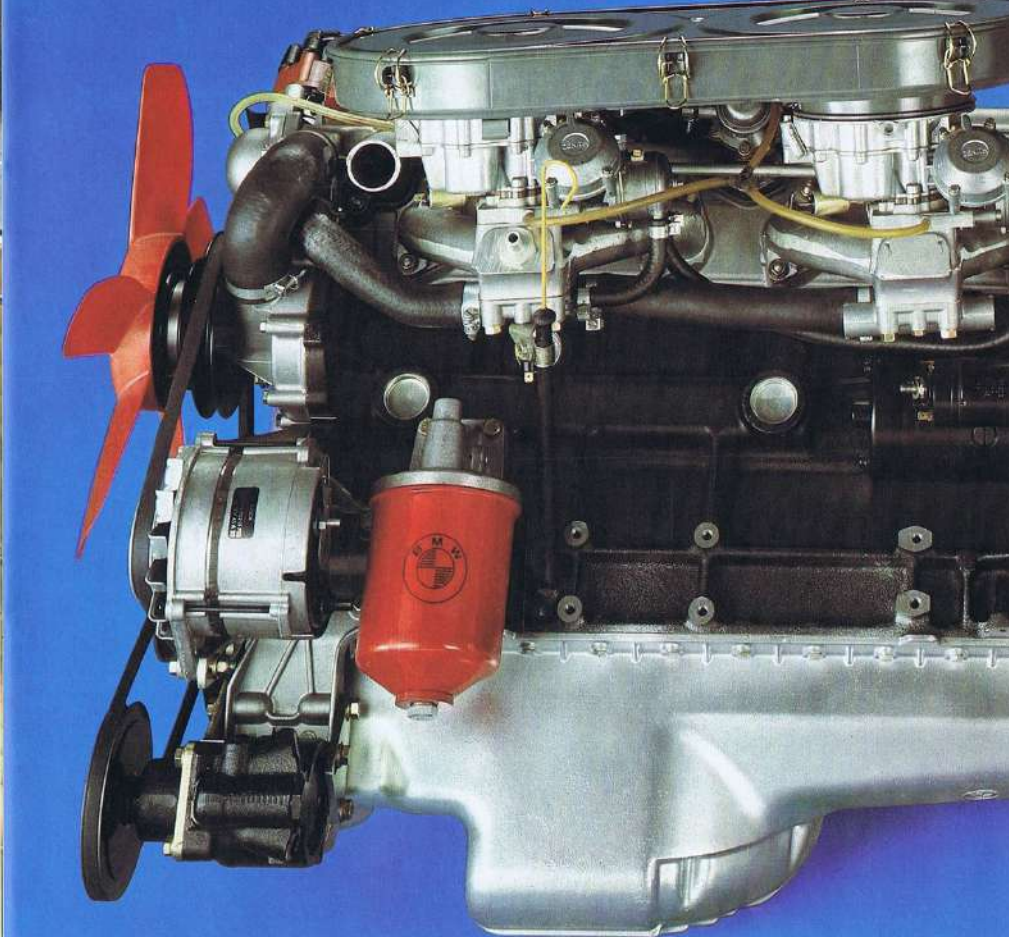
The overhead camshaft is supported by four bearings, and is driven by a double roller chain. Inclined overhead valves are arranged in V formation: Resultant cross-flow contributes also to more complete combustion.

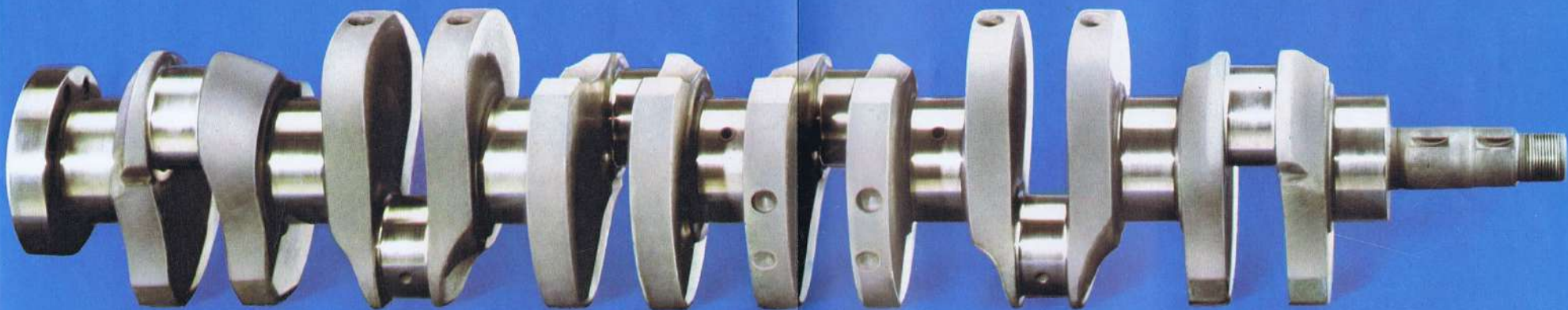
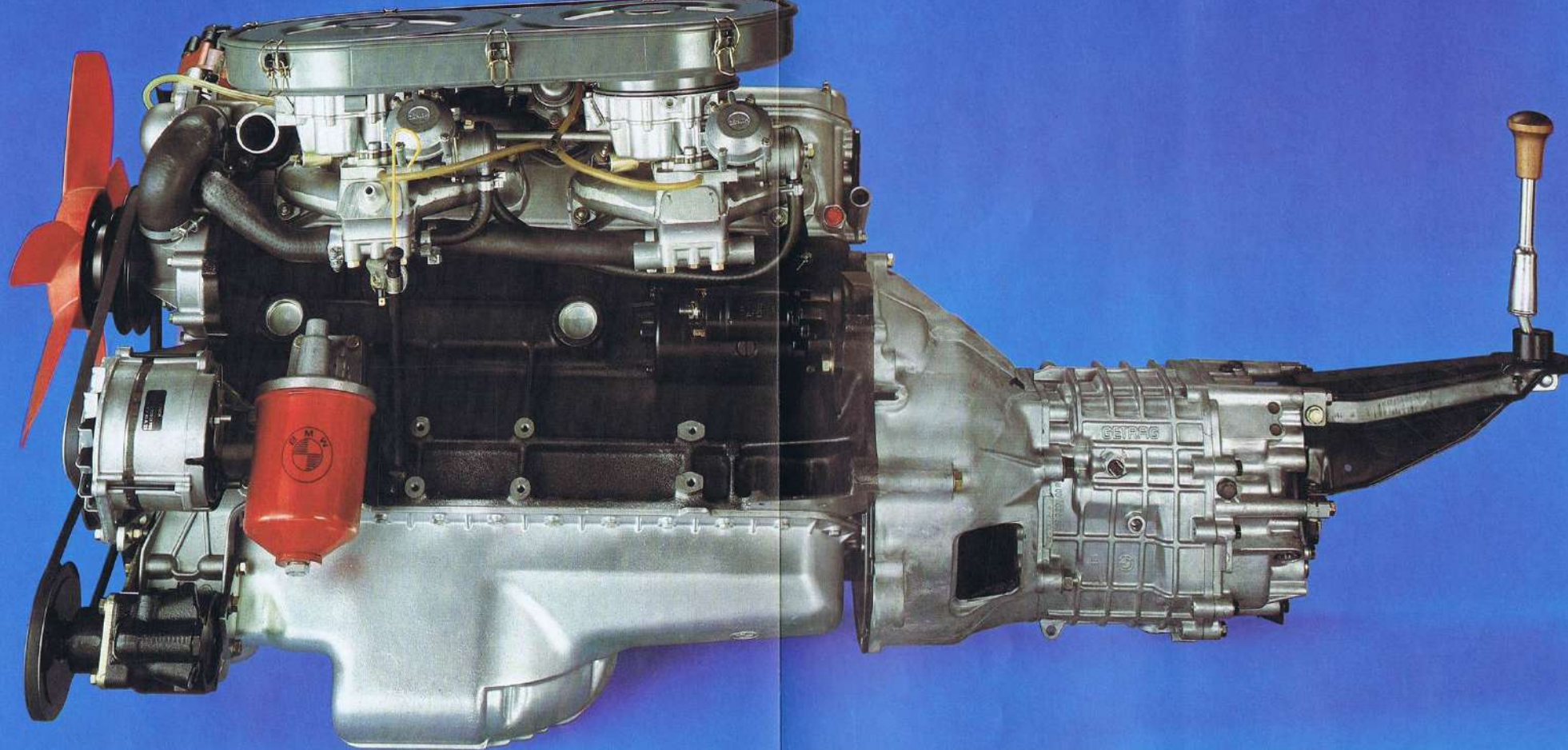
The crankshaft is supported by seven main bearings, and is balanced with 12 counterweights for extremely smooth running.

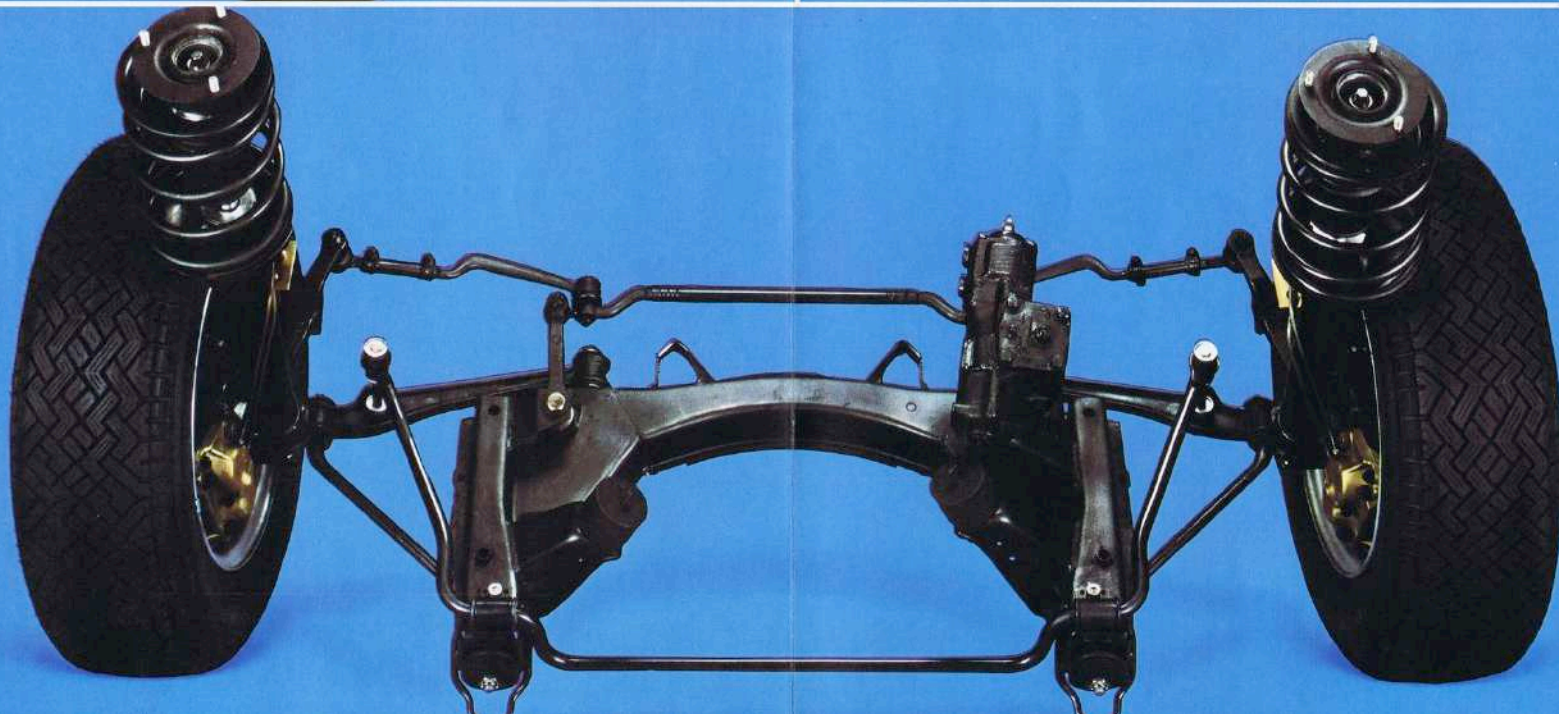
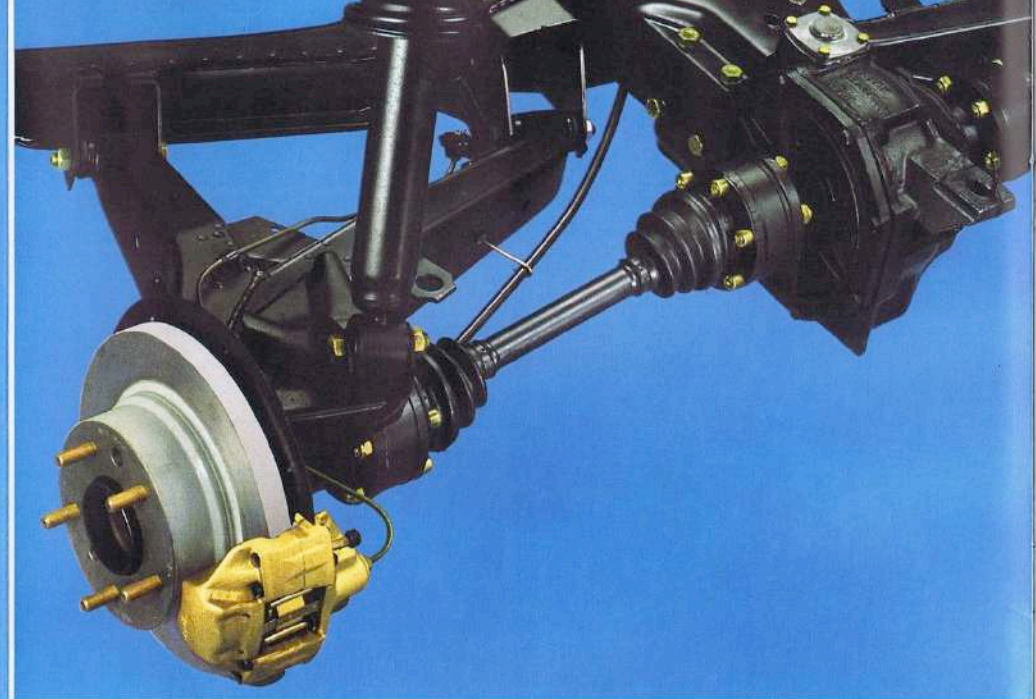
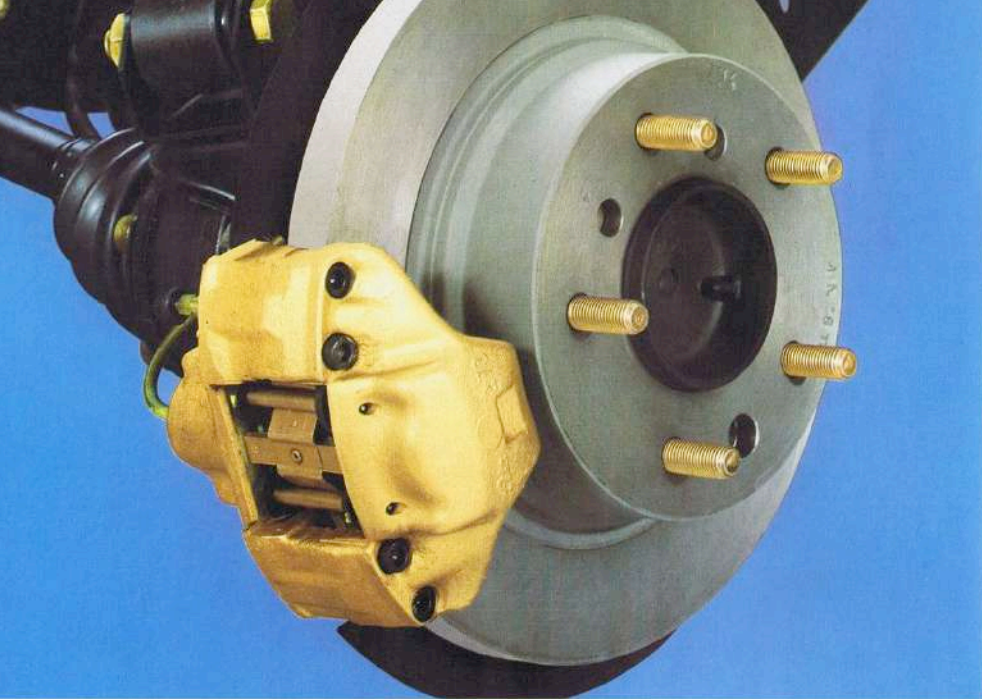
Fuel intake is through two Zenith two-stage carburetors.

Two transmissions are available: a fully-synchronized, four-speed manual with short throw stickshift for fast, positive changes. Or a smooth automatic, optional at extra cost.

Superior engine development has been the hallmark of the Bavarian Motor Works since its inception over 50 years ago. The new 3-liter series is our finest achievement.







Safety

At the Bavarian Motor Works, no phase of engineering development has a higher priority than safety. Ours is a constantly on-going program of innovation, testing, improvement.

As a result, the new 3-liter BMW's are equipped with a broad range of safety features, both active and passive.

By active safety we mean, of course, the ability of the car to avoid an accident. Among such features are:

1 Engine.

With its brilliant acceleration and great reserves of power, the BMW 3-liter provides the driver with a wide safety margin on which to draw. When he needs instantaneous response, he has it.

2 Suspension.

Fully independent system provides remarkable road-holding and extreme agility. No other car today is more sure-footed, especially when rapid evasive action becomes necessary.

3 Steering.

Worm and roller mechanism is quick, positive, and light to the touch, with exceptionally good road feel.

4 Brakes.

Servo-assisted discs on all four wheels for great stopping power. Dual twin-circuit system. If the first circuit fails, 75% of braking ability is retained.

5 Tires.

Radial ply construction, for unsurpassed dependability and adhesion to any road surface. More rugged and longer-lived.

6 Cockpit design.

All controls within easy reach. No unnecessary driver movement. Instruments are instantly readable, set in glare-free black housings.

By passive safety, BMW means those features which protect the car's occupants when an accident is unavoidable:

7 Passenger compartment.

Extremely rigid, with specially constructed cross-braces. Doors remain shut in a collision, yet can be opened afterward. Outside door handles are recessed. Rear doors have child-proof locks.

8 Crush zones.

Front and rear. Convert collision energy into pre-calculated deformation of metal. Fuel tank is under the trunk floor, protected by the spare wheel.

9 Steering equipment.

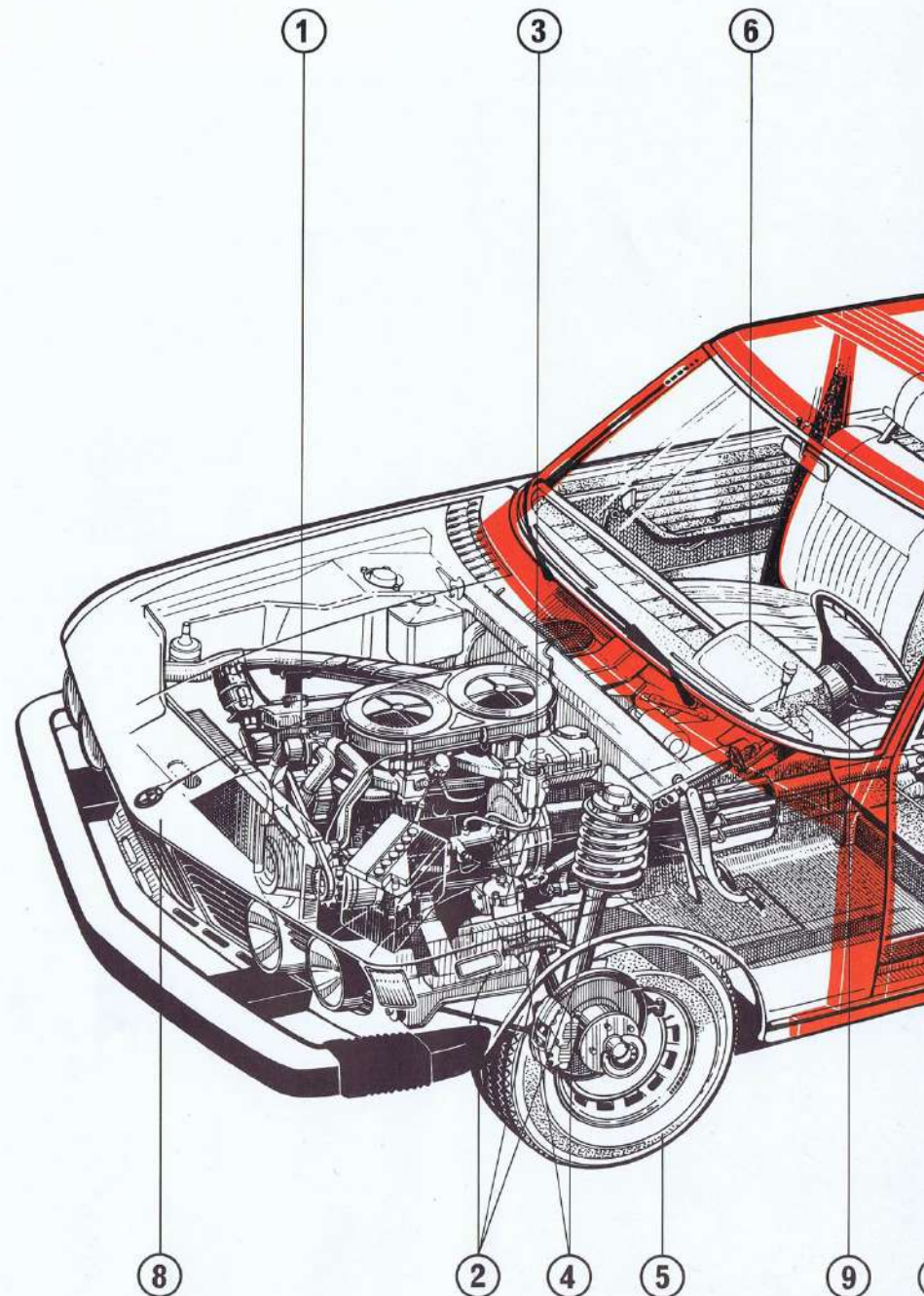
Located behind the front axle support, so that the steering column cannot penetrate deeply into the car in case of collision.

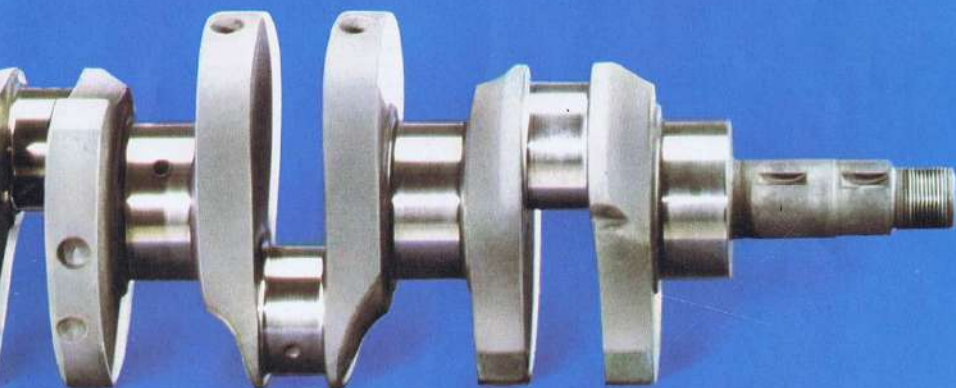
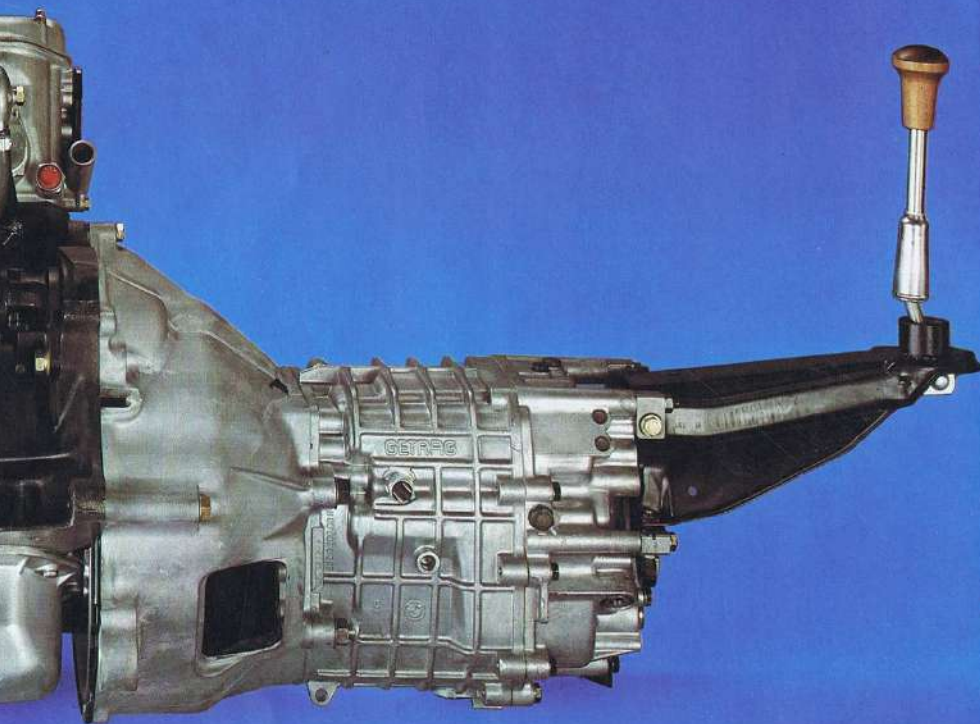
10 Safety belts.

Standard. 3-terminal design, with automatic reel retraction.

11 Headrests.

Standard front and rear in 3.0 S, rear optional in Bavaria.





Suspension

On the highways of the world, BMW road-holding has become almost legendary. The reason for this capability lies, of course, in our suspension system and in its harmony with the car's engine, drive-train, and chassis.

Developed by BMW, this fully independent system features spring struts in front, with eccentric displaced coil springs, trailing links, and hydraulic shock absorbers. The struts are inclined to the rear.

Axle pivot inclination reduces castor angle. This increases the negative camber of the outer wheel when the car is turning, thus providing greater lateral stability.

Spring and control-arm shaft are separate. This makes steering easier, even with wide tires. Spring travel is 7.5 inches.

The rear axles are multi-jointed. Suspension is on semi-trailing arms. Telescopic shock absorbers are combined with forward-inclined spring struts. Spring travel is 7.5 inches.

Both the 3.0S and Bavaria are equipped with a torsion bar stabilizer on the front axle. A limited-slip differential is optional at extra cost.

On a mountain road or a superhighway, roadholding is truly remarkable.

Brakes

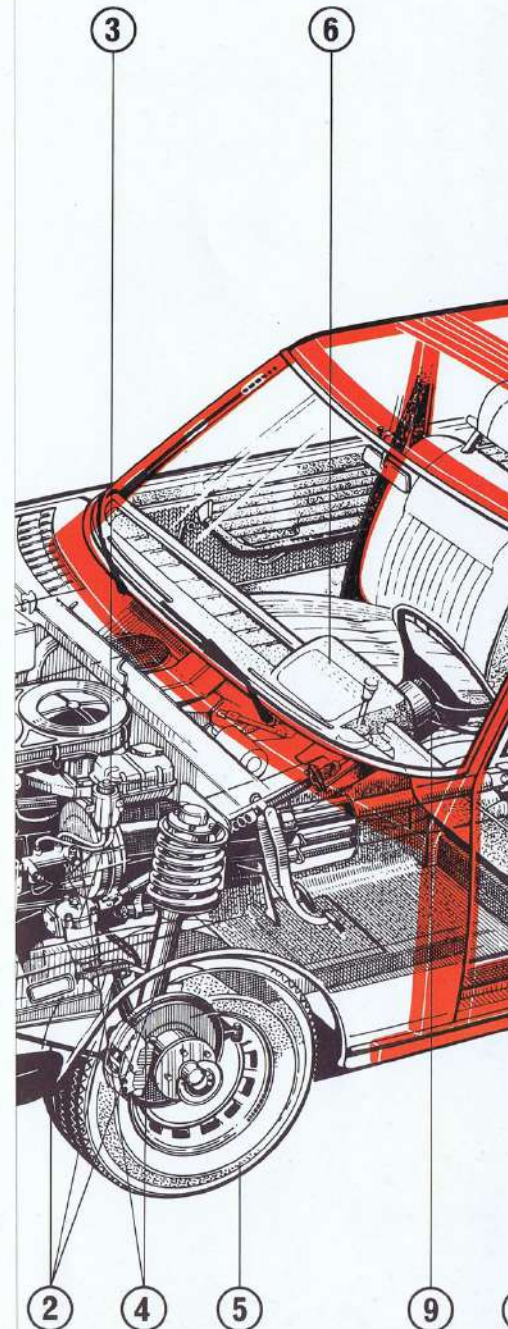
A high-performance car must have high performance brakes. BMW's are of very advanced design, and are extremely effective.

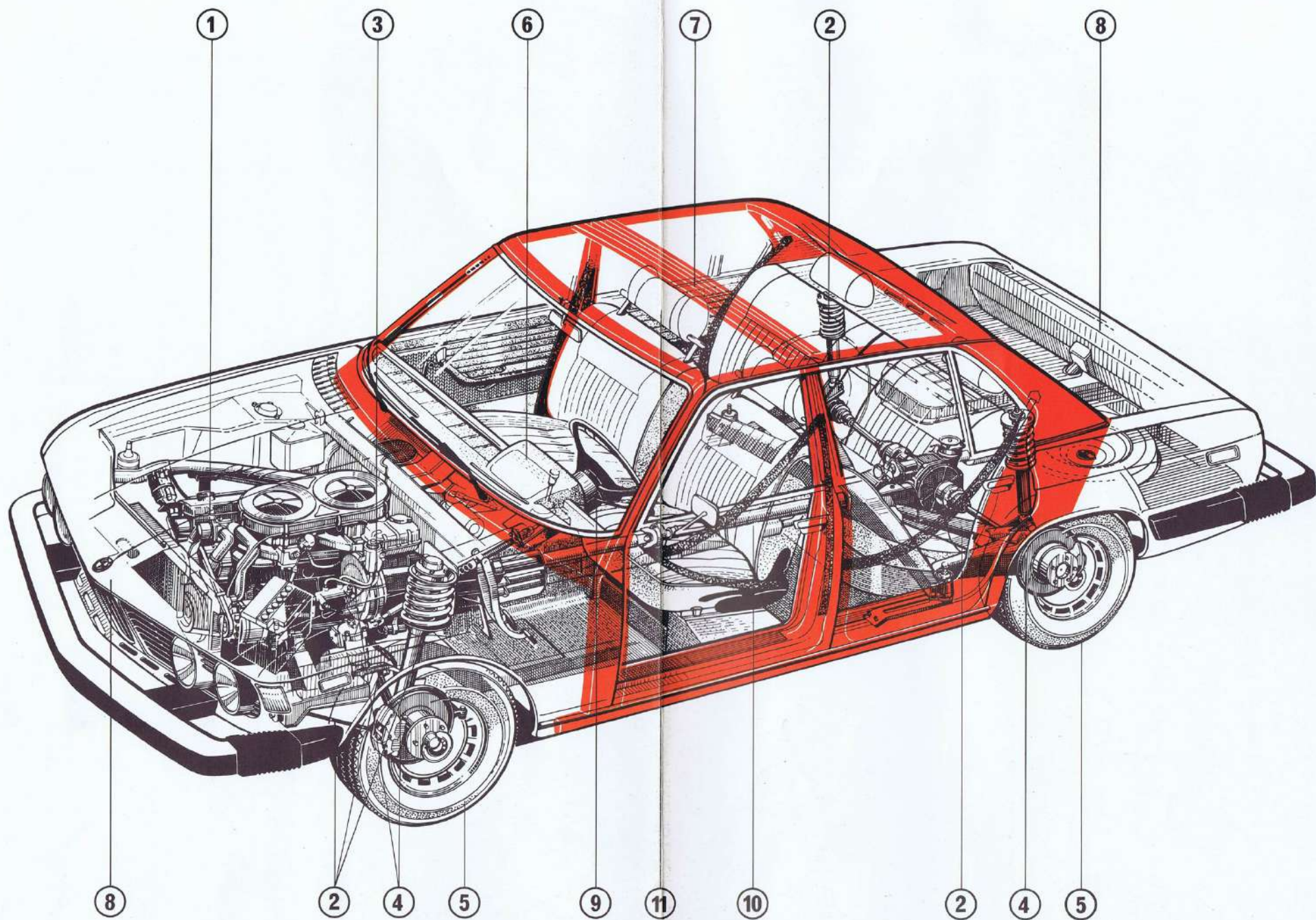
The brakes on all four wheels are servo-assisted discs. The servo increases the braking power of the foot 4.3 times.

While most cars today use a simple system employing one circuit on the front wheels and one on the rear, this wasn't good enough for BMW. Instead, we developed a dual twin circuit brake system.

In the BMW system, the first circuit acts on all four wheels. If the first circuit should fail, the second circuit will still provide 75% of the car's braking power.

To BMW, safety means the ability to stop, as well as to go.







Fasten Seat Belts



GENER. OIL BEAM FLASHER FUEL BRAKE
R R R R R R

AIR COLD FAN HEAT WARM OFF VENT
DEFROST



COLD
TEMP
AIR CONDITIONER
OFF

Radio controls and display.



Fasten Seat Belts

AIR

FAN

COLD

HEAT

WARM

OFF

VENT

DEFROST

WASH

WIPE

IGNITION

COLD

TEMP

AIR CONDITIONER

AIR

OFF

Radio Control Panel

L

BC

SW

FM

FM



Cockpit

This is where BMW efficiency is most obvious to the eye. All controls are immediately within reach. All instruments are instantly readable. To enable the driver to make the most of his ability. And to make driving the great pleasure it should be.

You see it in the instruments. The speedometer. The tachometer. Large, round, clear. In the smaller water temperature and fuel gauges. In the control lights for oil, headlights, blinker, tank, and brake. You see it in the sporty four-spoke steering wheel with its large, energy-absorbing upholstered safety cushion.

You see it in the convenience of the control lever groupings. On the left: directional signals, headlight dimmer, high beam flasher. On the right: windshield wipers, wiper speed control, and windshield wash-and-wipe activation. Never a moment's distraction, never the need to remove hands from the wheel.

You see it in the axially adjustable steering column, which can be adapted to suit any arm length.

You see it in the way the short-throw stickshift comes easily to hand.

You know then that this is a car designed to keep you in control at all times.



Comfort

For all its trim outside dimensions, the 3-liter BMW offers plenty of interior roominess, even for six-footers. Styling is extremely light and clean. Visibility is excellent, thanks to the large windows.

The front seats are individual buckets. They are horizontally adjustable, and the backs are fully reclining.

The driver's seat may also be adjusted to the precise height desired.

All seats have been orthopedically designed to minimize fatigue during long trips, as well as to provide optimum lateral support during cornering.

The floor is covered by strong, thick, loop-pile carpeting.

Heat and fresh air are provided by a remarkably efficient twin circuit system. It conducts fresh air for both air renewal and heating into the car at the same time, but through separate passages. When heating is turned off, the heat ducts can be used as additional fresh-air intakes.

The separate fresh-air circuit alone can draw 100 quarts of air into the car's interior each second while used air is expelled through vents at the rear of the passenger compartment.

Thus, at any temperature, the air inside the 3-liter BMW is always fresh and clean.

This kind of functional luxury is apparent in details throughout the car.

For example:

Map pockets front and rear.

Heatable rear window.

Illuminated glove compartment.

Extra compartment on driver's side, with outlet for rechargeable flashlight.

Illuminated ash trays front and rear.

Handgrips above the doors.

Tool kit inside the trunk lid. Deep carpeting in the capacious trunk.

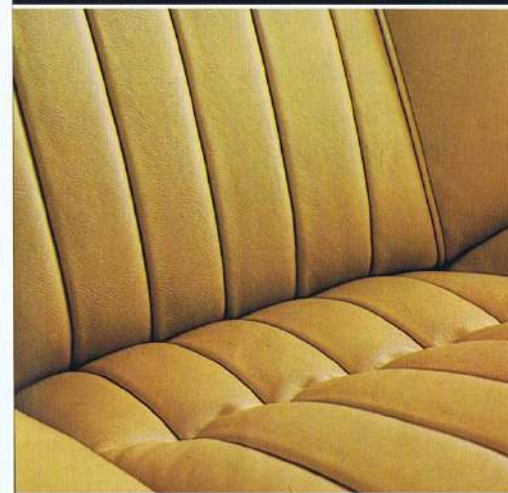




Luxury Features

All of the following features are standard equipment on the 3.0 S, and available at extra cost on the Bavaria.

- Power steering.
- Air conditioning.
- Electric window lifts.
- Becker AM/FM/Stereo radio, 3 speakers.
- Electrically-powered antenna.
- Rear safety headrests.
- Leather upholstery.
- Alloy wheels.
- Steel-belted radial tires.
- Retractable, complete special tool kit in trunk lid.
- Tinted glass.
- Leatherette covered steering wheel.



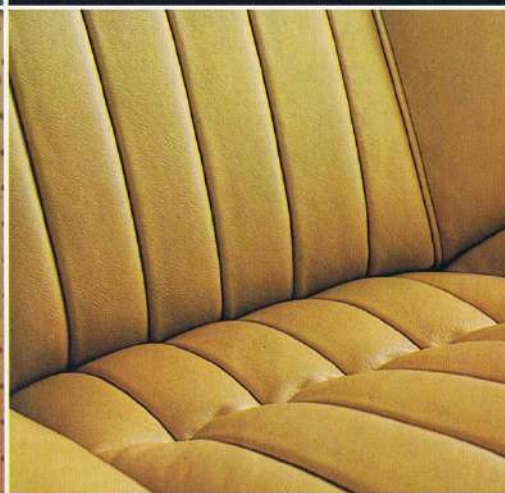
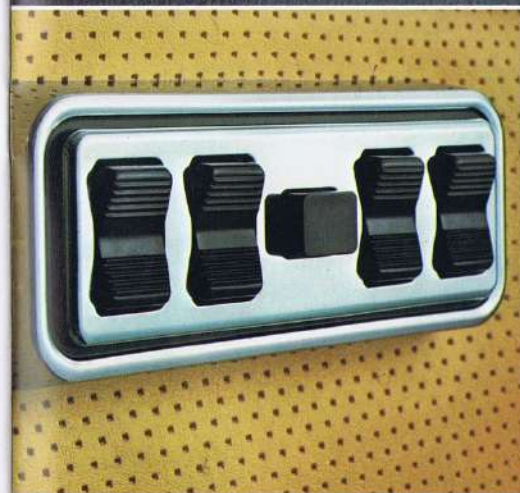
◀ Interior of the BMW Bavaria

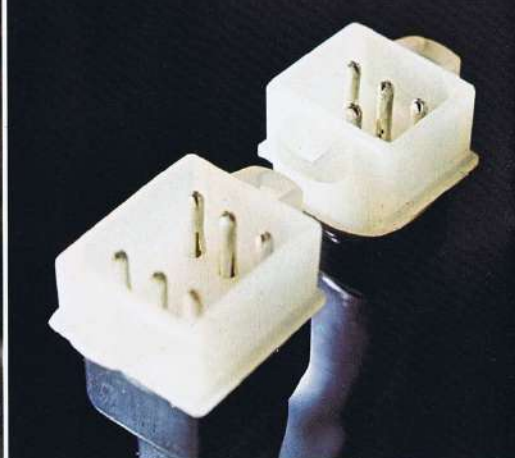
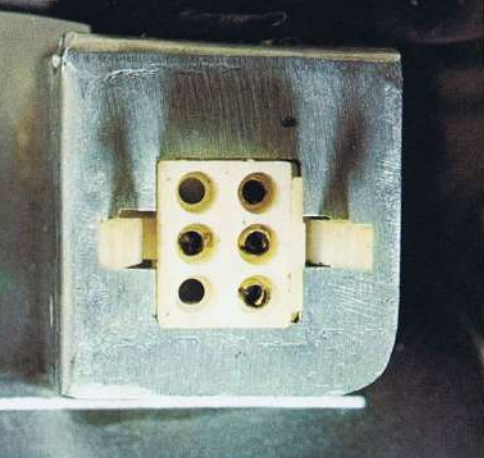


Optional Equipment

The following options are available at extra cost on both the Bavaria and the 3.0 S:

- Automatic transmission.
- Limited-slip differential.
- Sunroof.
- Metallic paints.
- Rear torsion bar stabilizer.





Service

How BMW owners can now enjoy rapid routine servicing, perfect engine tuning, and pin-point accuracy in the diagnosis of possible problems. This is because all BMW automobiles are equipped with two electronic plays: one for the low and one for the high

tension circuit. As a result, at BMW Electronic Centers regular inspections have never been quicker, nor trouble-shooting 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 Bavaria

BMW 3.0 S

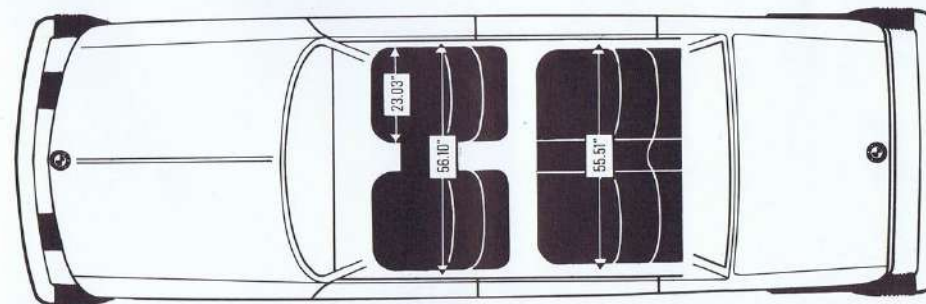
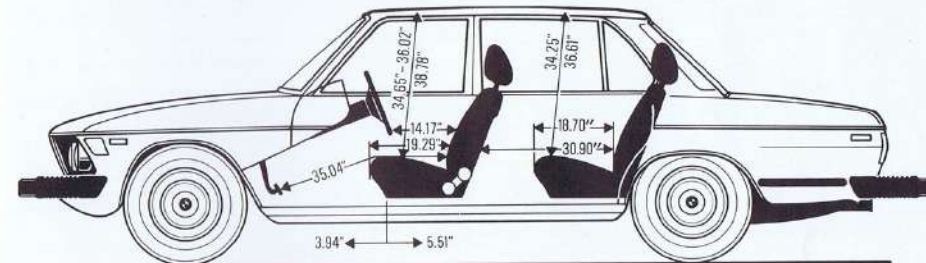
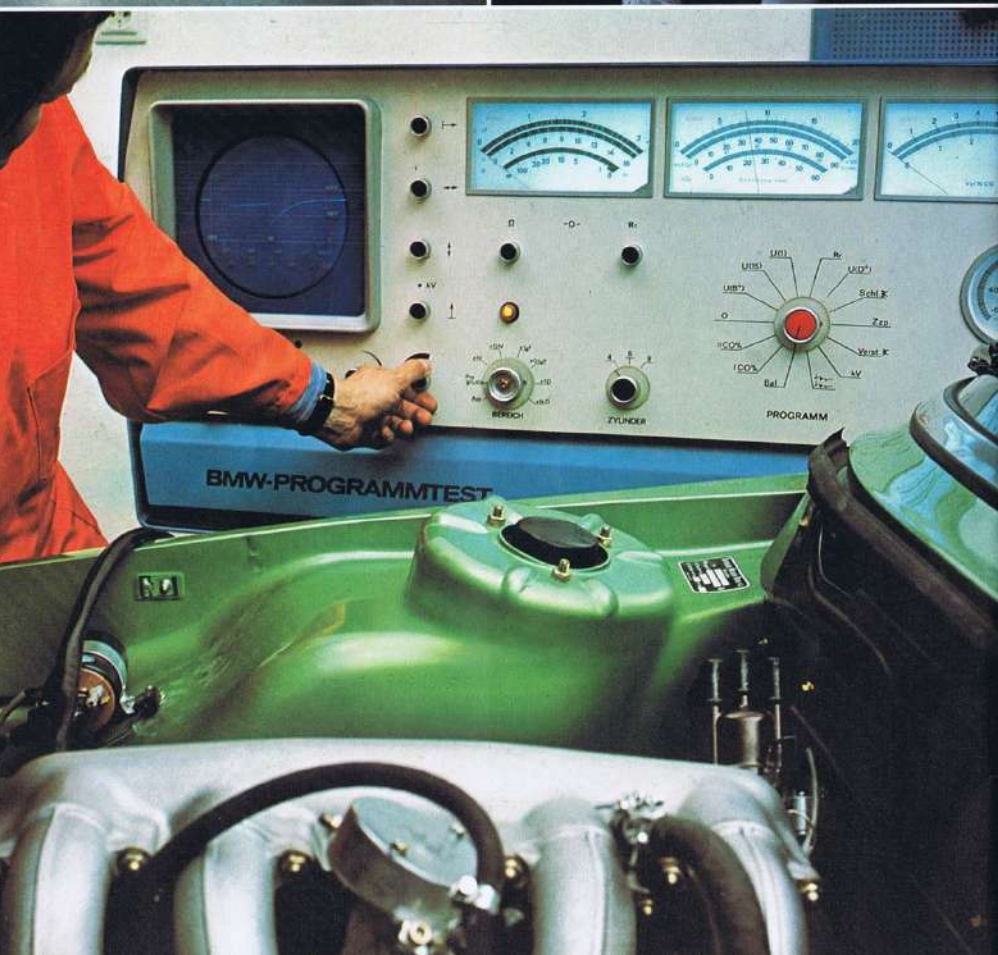
Dimensions and Weights

Torsionally stiff and rigid safety passenger compartment with crush zones front and rear, 4-door sedan welded to floor panel assembly reinforced by longitudinal and cross-section profile bars.

Length: 195.0", Width: 68.9", Height (unladen) 57.1", Wheelbase: 106", Track front 58.3" rear 57.6", turning circle dia. 34.5", front door cutouts 32.9", wide rear door cutouts 32.3" wide, front separate seats 23" wide, rear bench seat 54.4" wide, width at shoulder height front 56.1", rear 65.5", trunk capacity approx. 22.8 cu. ft., fuel tank capacity approx. 20.6 US/gal. including 2.1 US/gal. reserve.

GVWR 4300 lbs
GAWR front 2180 lbs
rear 2270 lbs
Service load 900 lbs

GVWR 4400 lbs
GAWR front 2190 lbs
rear 2380 lbs
Service load 900 lbs



BMW Bavaria**BMW 3.0 S****Engine, power transmission, performance**

Six-cylinder four-stroke in-line engine, triple hemispherical swirl-action combustion chambers with volume concentration effect around the spark plug, overhead camshaft with 4 main bearings, parallel-displaced inclined overhead valves in V-arrangement, duplex roller chain drive, vibration damped, crankshaft with 7 main bearings and 12 balance weights, torsion vibration damping, Water cooled with automatic breathing, pressure oil circulation, full-flow oil filter with regulating valve.

Capacity 2.985 cc
Stroke 3.150 in
Bore 3.604 in
Power 170 hp (SAE J 245) net at 5800 rpm
Torque 185 ft.lb (SAE J 245) at 3500 rpm
Compression ratio 8.3:1

2 Zenith carburetors 35/40 INAT two stage, with second stage vacuum controlled automatic choke accelerator pump.

Ignition distributor with engine speed governor, centrifugal and vacuum advance.

12 Volt, 630 Watt three-phase current alternator 12 Volt, 770 Watt

Battery 12 Volt, 65 Amp hr

Gearbox

a) manual transmission 4-speed with synchromesh

I. 3.855 II. 2.203 III. 1.402 IV. 1.0 R. 4.3

b) automatic transmission 3-speed with torque converter is optional equipment

I. 2.390 II. 1.450 III. 1.000 R. 2.090

Final drive ratio 3.64:1 (hypoid gears)

Maximum speed 121 mph

Acceleration from 0 to 60 mph: 9.4 sec

gas consumption 13.3 mpg (refer to EPA labeling program)

Chassis and Brakes

Wheel suspension front: Independent, with spring struts inclined backwards at top, wishbones and trailing arms pivoting in large-capacity rubber mountings, coil springs with rubber auxiliary springs high-mounted and offset in relation to strut center-line, 7.5" spring travel, double-tube telescopic shock absorbers and stabilizer.

Wheel suspension rear: Independent with semitrailing arms pivoting on rubber mountings; spring struts with high-mounted coil springs and rubber auxiliary springs, 7.5" spring travel; double-tube telescopic shock absorbers.

ZF-Gemmer steering system with worm and roller ZF-hydraulic power-assisted steering system, overall ratio 18.4:1
three-part track rod, safety steering column with 2 universal joints, overall ratio 22.5:1

Steel rims 6 J x 14 Light-alloy rims 6 J x 14

Radial-ply tires 175 HR 14 Radial-ply tires 195/70 VR 14

Dual twin-circuit 4 disc braking system with servo unit

Front: 4-piston fixed caliper disc brakes with automatic adjustment.

Rear: fixed caliper disc brakes with automatic adjustment and additional pressure regulating device disc diameter 10.7". Mechanically operated handbrake, additional duo-servo drum brake dia. 6.3" with self-serving shoes; acting on rear wheels.

Equipment

Heating and ventilation: Fresh-air high performance air controlled heating system, tuned down three-speed blower, independent air-flow of driving speed, immediately effective temperature control, footwell heating with directional nozzle, windshield demisting.
Fresh-air supply by directional nozzles in instrument panel, ventilator grille with adjustable direction flaps. Air extraction through slots in the rear roof pillars.

Rubber-padded bumpers.

Fully-retracting wind-down windows front and rear

Safety glass laminar windshield heated rear window, engine compartment light.

Tinted glass. Fully-retracting electrically-operated window front and rear

Air conditioning, leatherette covered steering wheel, stereo radio with 3 speakers and automatic antenna, lockable glove compartment, engine compartment light, interior wood trim also on doors.

Instrument panel with speedometer, odometer and trip recorder, fuel gauge water-cooling thermometer, cigarette lighter, tachometer, quartz-clock 4-sealed-beam headlights (switched off automatically with ignition) hazard warning flashers, 2 reversing lights, interior light with 4 switches on door pillars, automatic screenwasher with time switch operating at intervals and two wiper speeds, continuous control of instrument lighting intensity, telltale warning lights for battery charge, direction indicators, hazard warning flashers, oil pressure, fuel tank, headlight main beam, handbrake and brake fluid warning. Convenient stowage places: In glove compartment with light, above the instrument panel, stowage box on middle console (Bavaria model only), pockets in the backrests of front seats and in the front doors. Additional stowage compartment at the left of steering column with carrier for fuses.

Ball-type door lock and safety locking wedges, childproof locks on rear doors.

Safety grips, safety interior mirror, safety ashtray in instrument panel. 2 ashtrays on rear doors, full carpeting in passenger compartment.

Trunk fully carpeted and filled with stowage pocket. Separate seats in front with fully-adjustable seat backs.

Ski upholstery

Headrests front

Rear seat with center armrest.

Armrests on doors. All seats equipped with automatic safety belts. Drivers seat adjustable according to height and inclination, full axial adjustable steering column.

Leather upholstery
Headrests front and rear

Tool kit in flap of luggage compartment lid

Special tool kit in flap of luggage compartment lid.

Lockable glove compartment

Rear compartment heating at foot level

Optional Equipment

Limited slip differential, second exterior mirror, metallic paints various carpets, lockable tank cap, steel sliding roof (manual or electric).

Leather upholstery

Air conditioning

Power steering

Electric windows

Tinted glass

Radios

Rear headrests

Special tool kit in flap of luggage compartment lid

Lockable glove compartment

Rear compartment heating at foot level



BMW - sheer driving pleasure

Printed in Western Germany

2nd

20/1000

x 6400

3rd

30

x 6400

