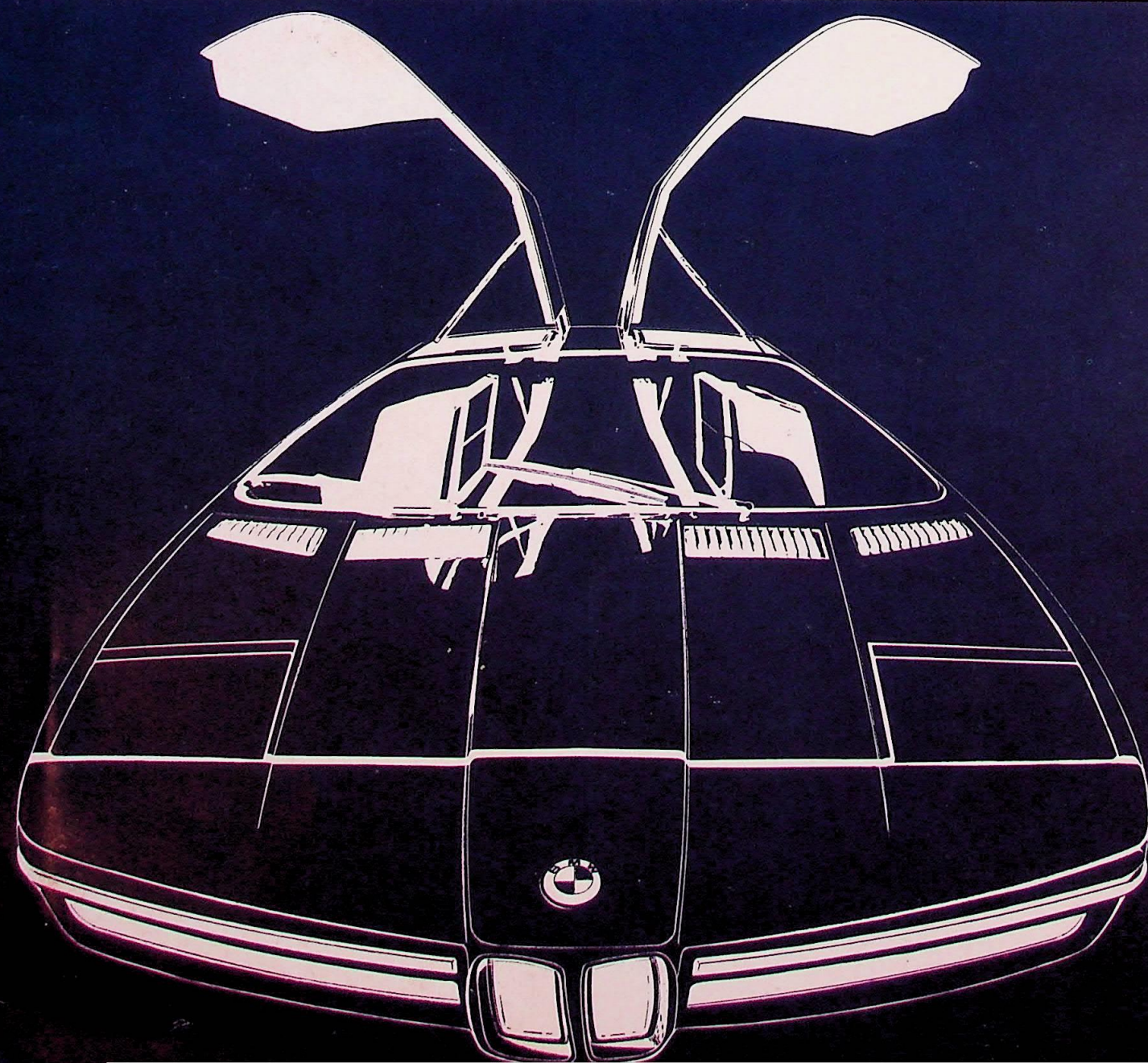
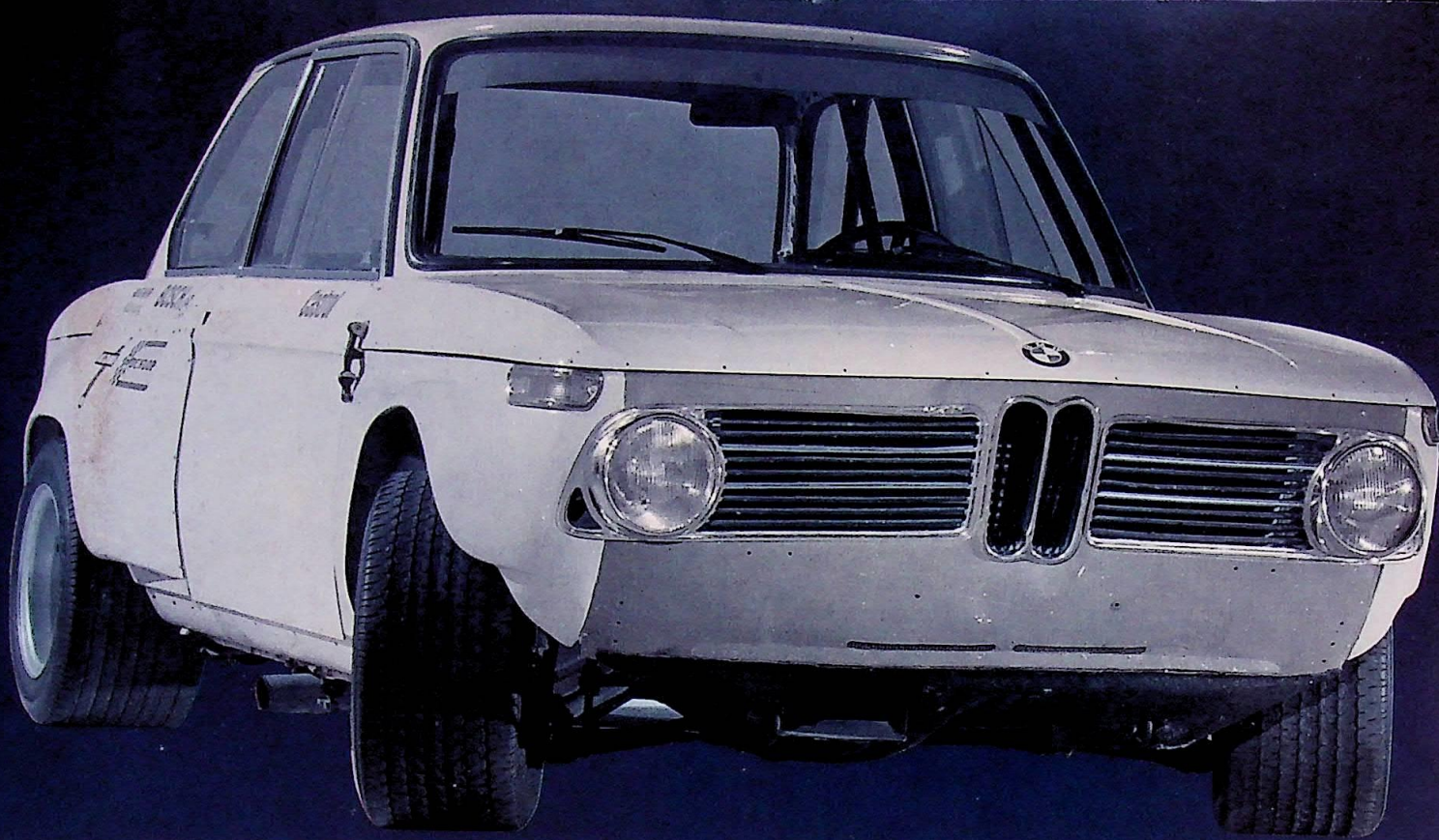




BMW

2002 *turbo*





It is a high ambition to build a motor-car that stands a good chance in motor sport and at the same time possesses qualities for problem-free everyday use.

This unusual task was a challenge to the pioneer spirit of BMW designers.

The necessary requirements for the job were there.

The ability to convert exceptional technical knowledge into building production-line sports vehicles.

Experience in racing – in 1969, BMW won the European Touring Car Championship with a BMW 2002 equipped with a 275 PS-turbo supercharger motor.

Futuristic findings in research – in 1972, the BMW turbo, one of the most advanced experimental vehicles, was introduced.



It is a high ambition to build a motor-car that stands a good chance in motor sport and at the same time possesses qualities for problem-free everyday use.

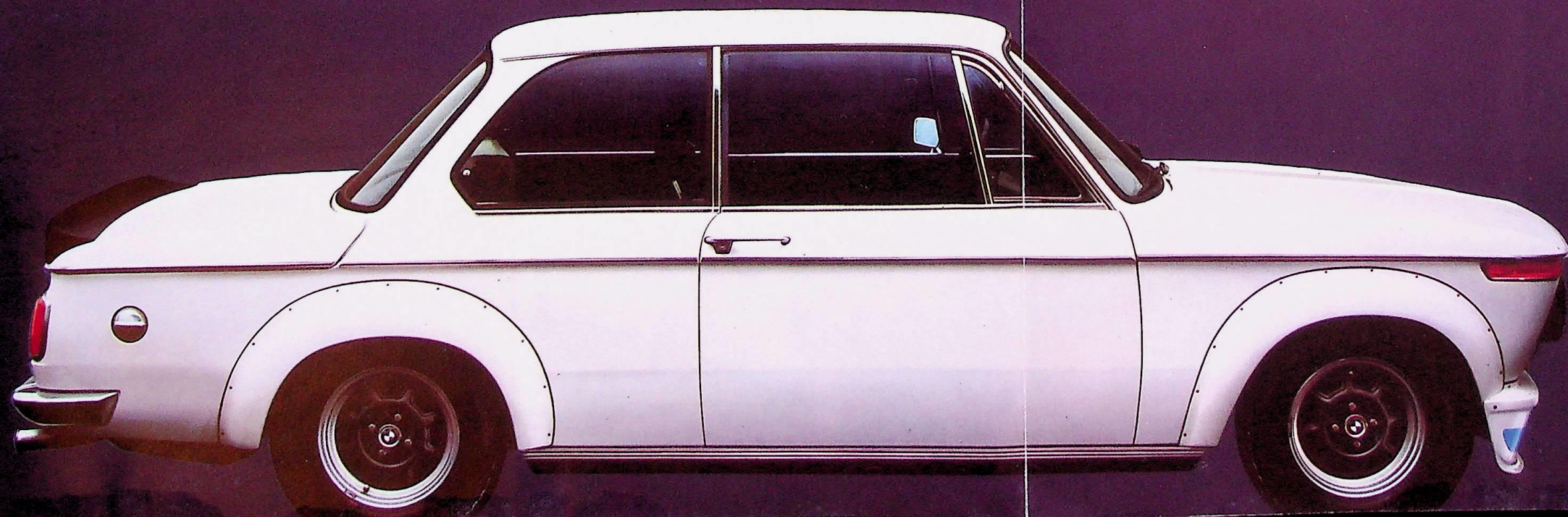
This unusual task was a challenge to the pioneer spirit of BMW designers.

The necessary requirements for the job were there.

The ability to convert exceptional technical knowledge into building production-line sports vehicles.

Experience in racing – in 1969, BMW won the European Touring Car Championship with a BMW 2002 equipped with a 275 PS-turbo supercharger motor.

Futuristic findings in research – in 1972, the BMW turbo, one of the most advanced experimental vehicles, was introduced.



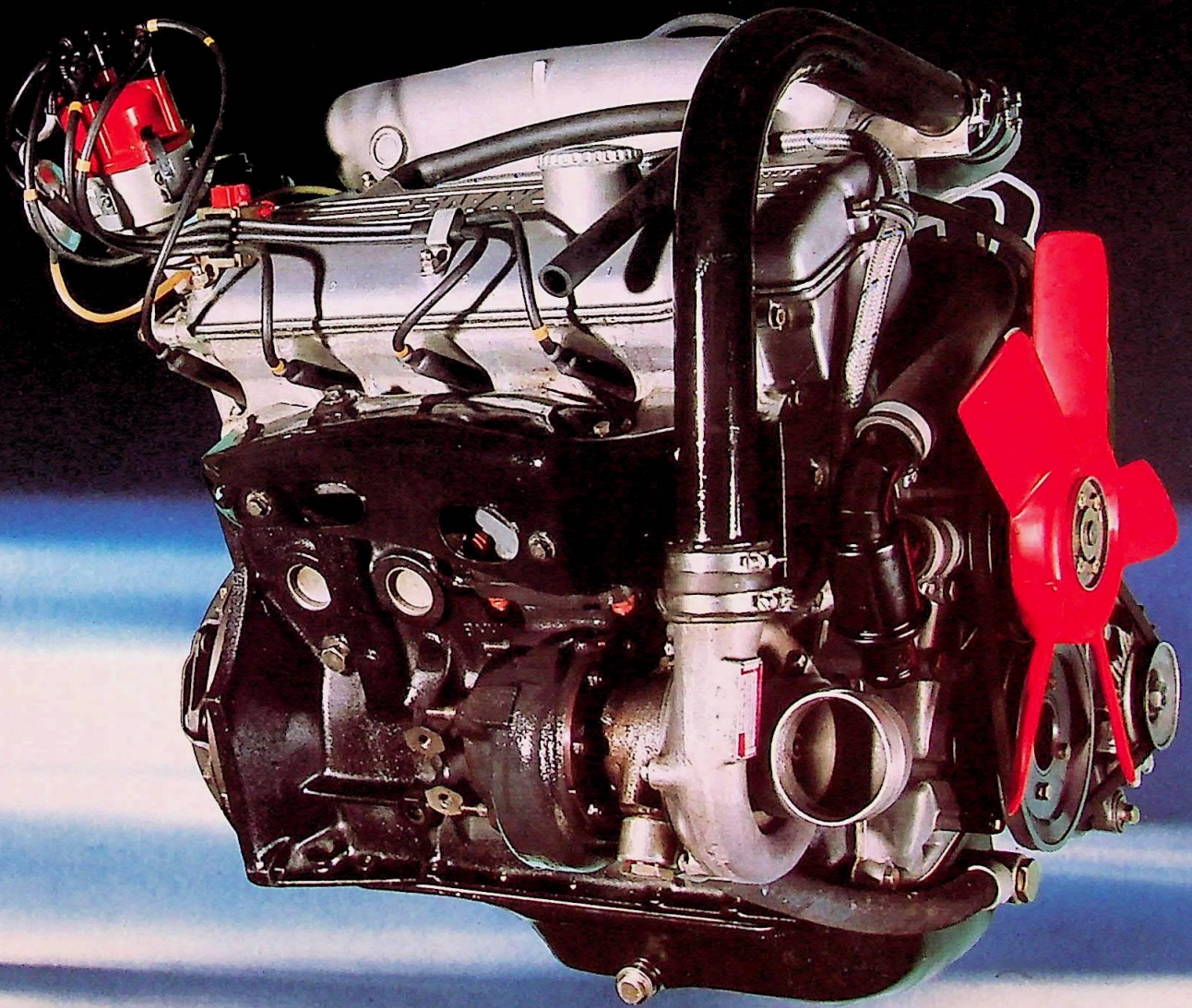
The styling complements the considerably increased performance. Shape determined by function and specific uses. Technical, but at the same time sporty streamlining. Stabilized by the front spoiler and the mounted rear spoiler. Both features adopted from motor sport. Practical results from the race tracks together with scientific back-up from the wind tunnel.

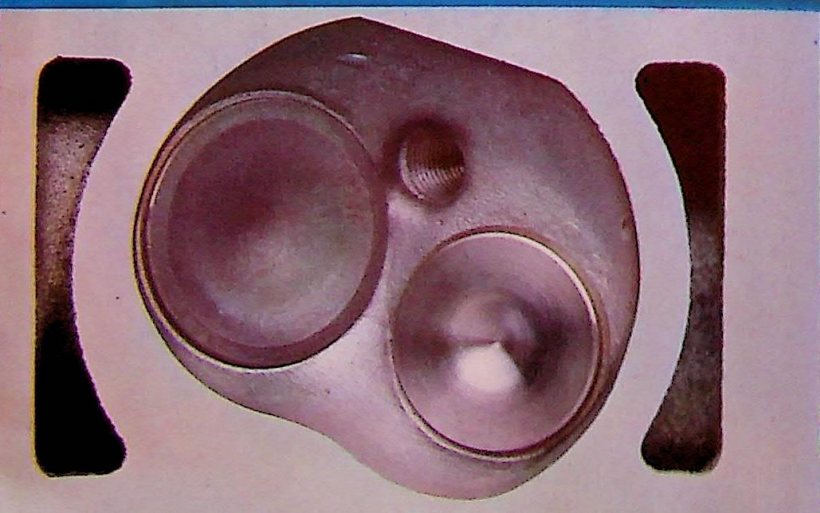
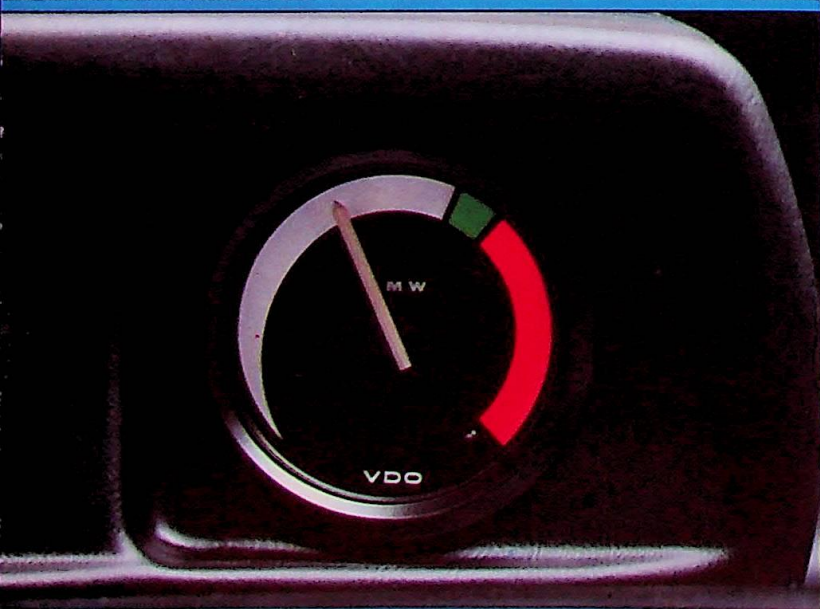
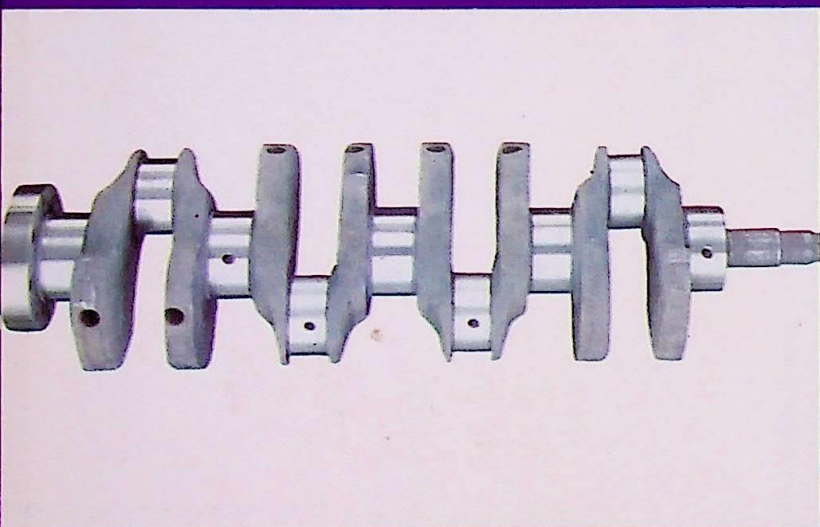
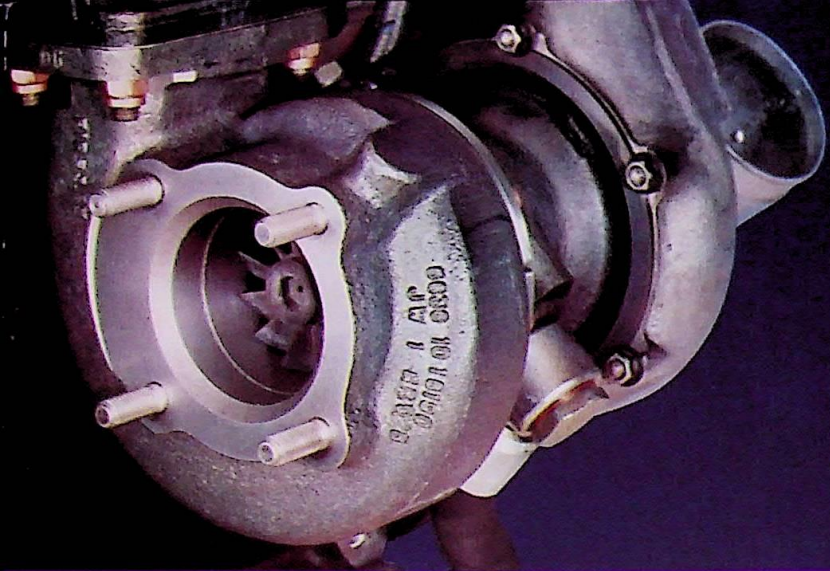
The front spoiler reduces air resistance and lift on the front axle. The spoiler can be removed without difficulty, should particular road conditions make this necessary.

The rear spoiler, of particularly flexible material, increases rear axle adhesion, avoids turbulence and reduces drag.

With its outstanding engine performance the turbo is kept firmly on the road by 5½ inch steel rims and tyres size 185/70 VR 13. The wheel arches have been broadened and the wings can be unscrewed to make way for even broader tyres for racing. The absence of bumpers give a functional front line.

Black radiator grill, sports rims, rectangular four-chamber rear lights are rational accents on design.



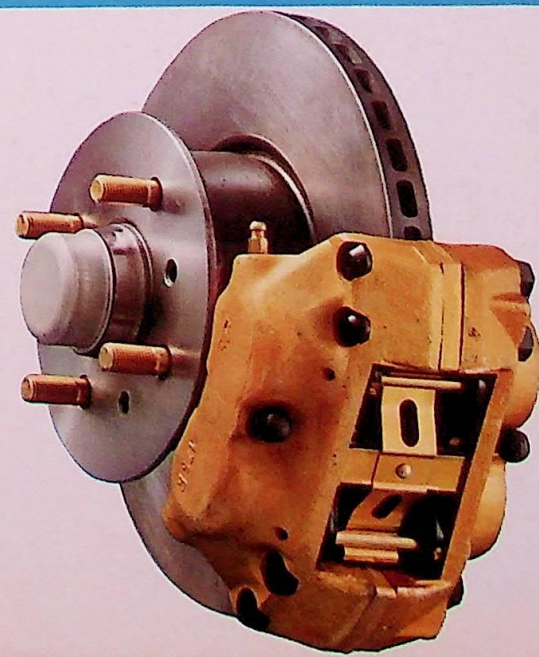
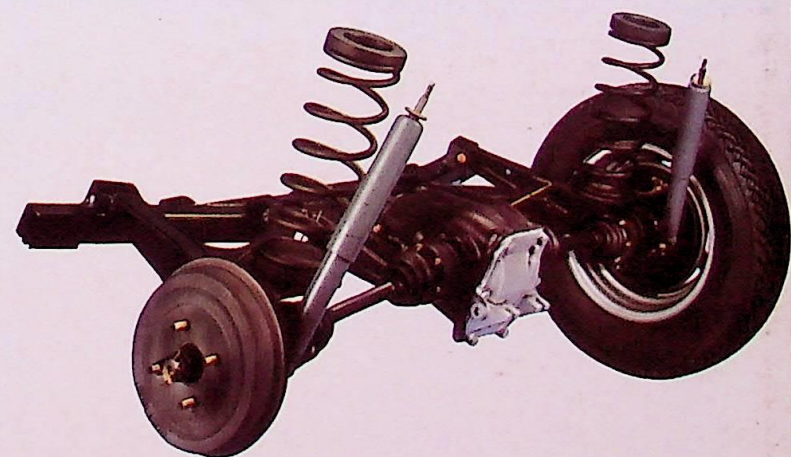
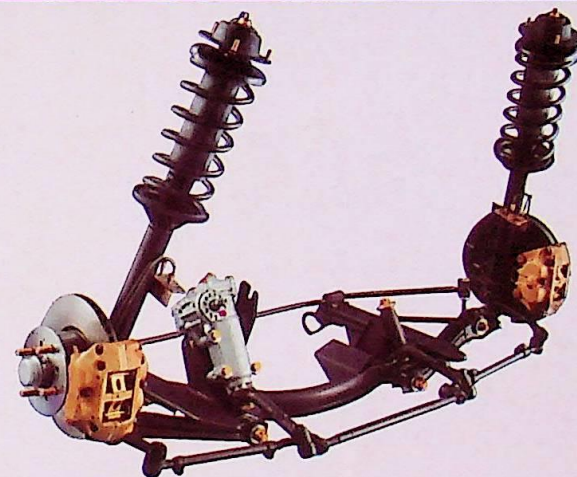


In everyday road usage with normal motoring requirements, full engine performance is ready to be called upon. The turbo-supercharger starts off gently at a low rev. count. The engine, tuned to high performance, runs with little noise. Without vibrating. Without jerking. The exceptional performance of the BMW 2002 turbo requires exceptional design technology: an oil cooler. An exhaust system of highly heat-resistant material.

Oil cooler. High power condenser ignition system. An exhaust made from high temperature resistant material.

An exemplary chassis construction, providing safety and stability for the BMW 2002 turbo performance.

This is based on the adapted technology of the wellproven BMW 2002 suspension: spring struts, which ensure optimum roadholding under all conditions. A steering system that permits fast, exact steering manoeuvres. An impressive rear axle with inclined semi-trailing arms which adjust back wheel toe-in and camber independently and therefore always guarantee the best possible lateral stability and road adhesion. Torsion bar stabilizers at the front and back. Large internally ventilated disc brakes at the front. Reinforced rear drum brakes. Brake servo and brake pressure limiter for the back axle. The limited slip differential makes it possible to corner accurately and move safely between confined points.







The cockpit of the BMW 2002 turbo is the realization of all experience gained from motor sport and new findings in motoring psychology. Designed for quick reactions. Short reach operations. Concentrated at a glance inspection. Rentrop bucket seats with head-rests provide sure hold round fast bends. Sports steering wheel, firm grip, easy to handle. The instrument panel is finished in red, set against a dazzle-free black background – a clear and well-defined signal to the driver. Rev. counter. Speedometer up to 240 km/hr. Charge-pressure gauge.

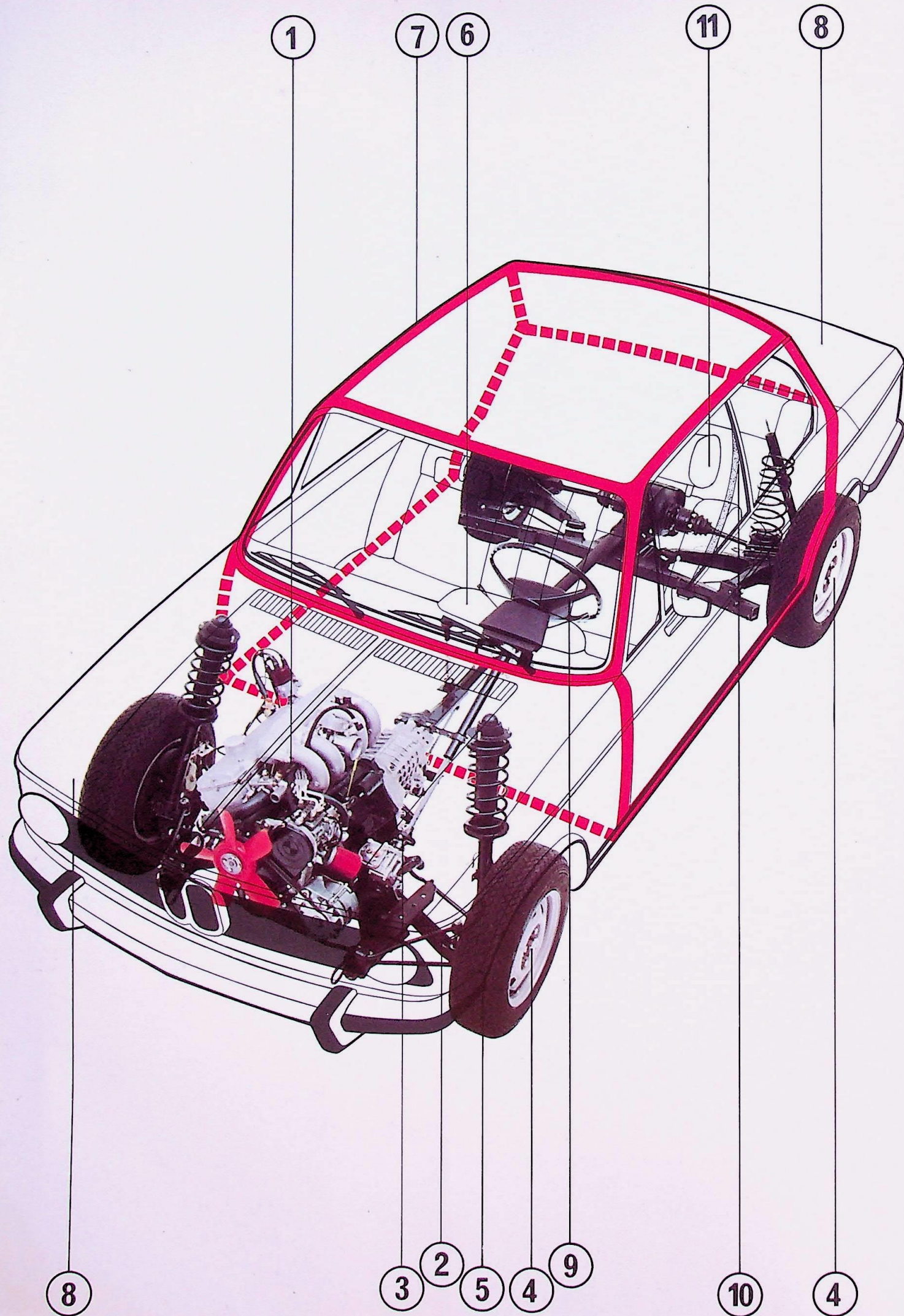
The BMW 2002 turbo combines performance with appropriate comfort. The interior and the seats are fitted for the wellbeing and comfort of the passengers and driver. Relieved of tension, the driver can concentrate fully, making quick and well-considered decisions.

Rentrop front bucket seats ensure fatigue-free travelling. They can be adjusted to every sitting position and can even be set right back: yet leaving sufficient room for the other passengers. The fixed rear seats are made to leave comfortable leg-room.

Well-designed fittings: Like the wide angle doors: side panelling with built-in arm rests: heating and fresh air system to suit weather conditions: generous sized boot.

Well-designed fittings: for the fully developed production line vehicle designed with driver and passengers in mind.





The BMW 2002 turbo body has not only been designed on aerodynamic and aesthetic lines: other important factors were the strict BMW safety requirements.

Cross-braked passenger compartment. „Crumple“ zones front and rear absorb energy on impact. Firmly anchored seats. Safety steering assembly. Impact protection on the instrument panel. Inertia reel safety belts adapted to the passengers' movements. Headrests on the front seats. Adjustable inside driving mirror. In addition to these passive safety features the BMW 2002 turbo is equipped with the maximum of active safety features: an engine with paramount acceleration. A safety chassis that handles sudden swerves safely. The centrifugal force when rounding bends is easily coped with – up to 80 per cent of the car's weight. A twin circuit braking system which, even with the failure of one brake cylinder, is far above the legal requirement. All round vision. Functional instruments. All this is complemented by effective and safe lighting: halogen headlights and rectangular 4 chamber rear lights.

Active safety

- 1.** The powerful engine with its inherent quiet running, ensures driver alertness, shortens recovery manoeuvres and keeps accident risk to a minimum.
- 2.** Suspension.
The BMW chassis has become an ideal example even in critical situations, it allows correction of driving errors.
- 3.** Steering.
The accurate steering has been developed to suit all driving situations. Safer directional hold even over surface bumps.
- 4** Brakes:
The servo-assisted dual circuit braking system with discs on the front and drums at the rear meet all braking requirements.
- 5.** Tyres
The wide, belted tyres size 185/70 VR 13 keep the optimum, highly tuned and powerful machine safely on the road.

6. Cockpit design

BMW has fitted out the passenger compartment according to the strict standards of functional design. Operational safety, spontaneous instrument reading, safe driving by anatomically accurate seat positioning. All these details are the result of years of research and combine to give the highest degree of motoring safety.

Passive safety

7. Safety compartment

The passenger compartment is particularly sturdy and remains almost undamaged in any type of accident. The doors stay closed on impact, yet can be opened after an accident.

8. „Crumple“ zones

Nose and tail form crumple zones that absorb energy on impact. Steering column and steering box are situated outside the damage area. In this way, the backward movement of the steering column is reduced to a minimum.

9. Steering assembly

The sure-grip and small diameter steering wheel is soft-padded.

10. Safety belts

The BMW 2002 turbo has standard 3 point inertia reel safety belts at the front.

11. Head-rests

Standard, height adjustable head-rests in front protect the neck and spinal column.

Extras

Sports extras:

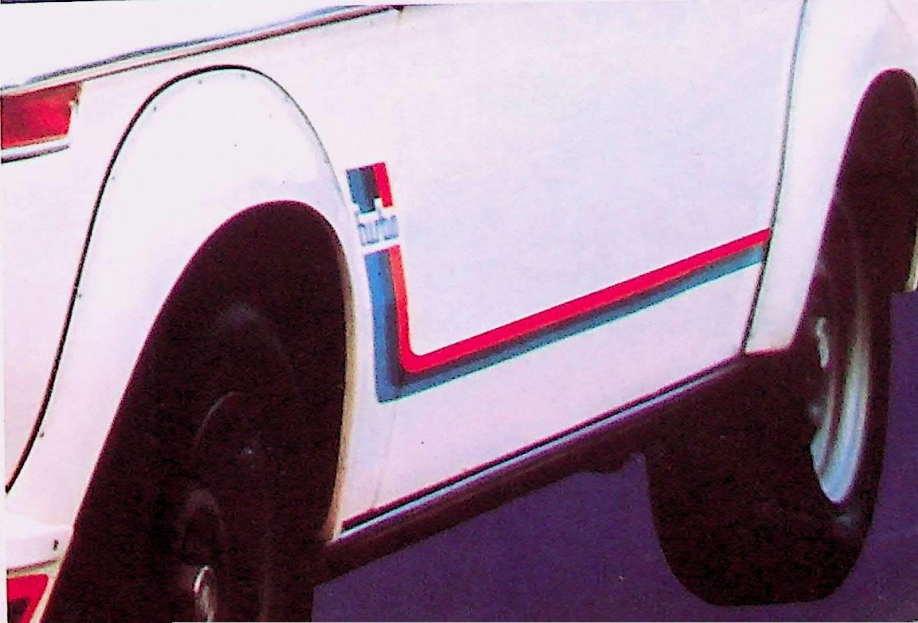
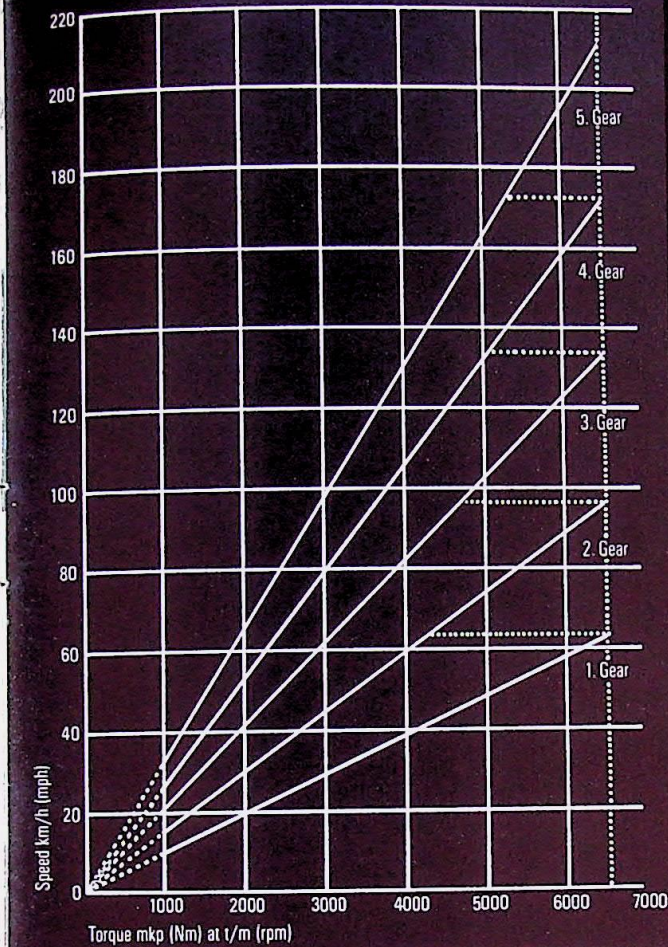
5 speed gearbox, light alloy sports wheels
6 Jx13 H2 (in preparation).

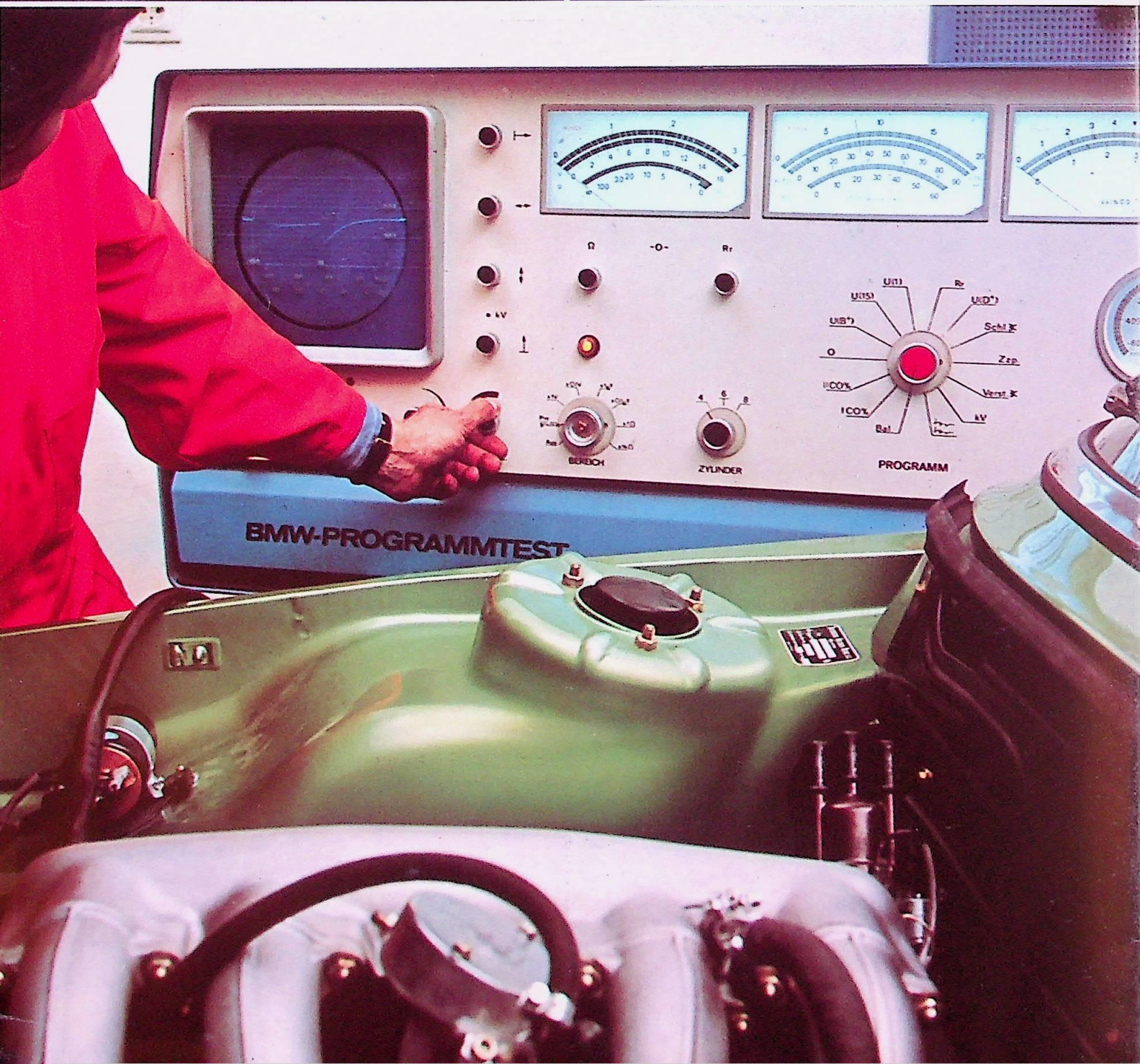
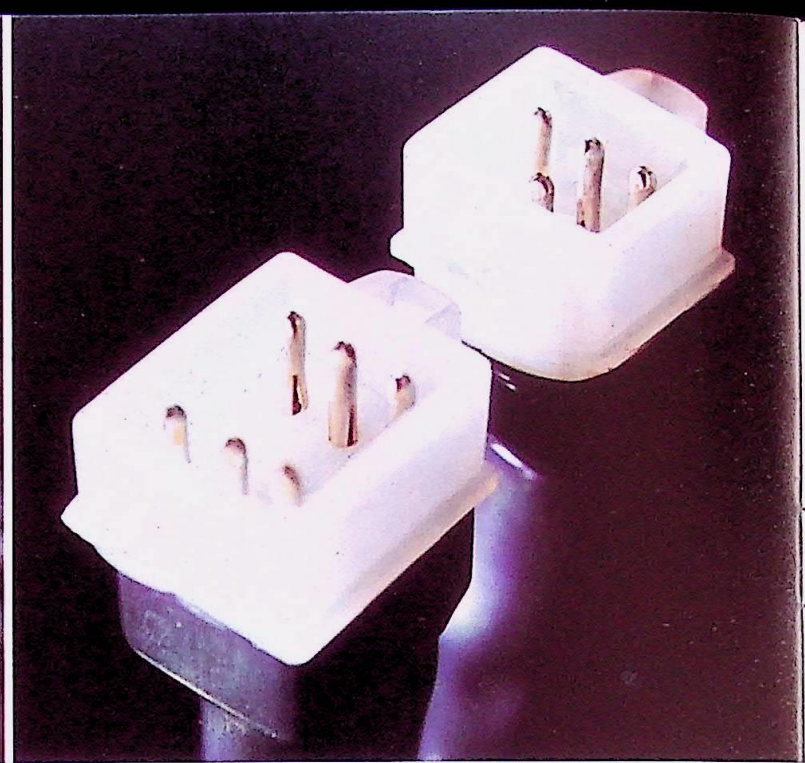
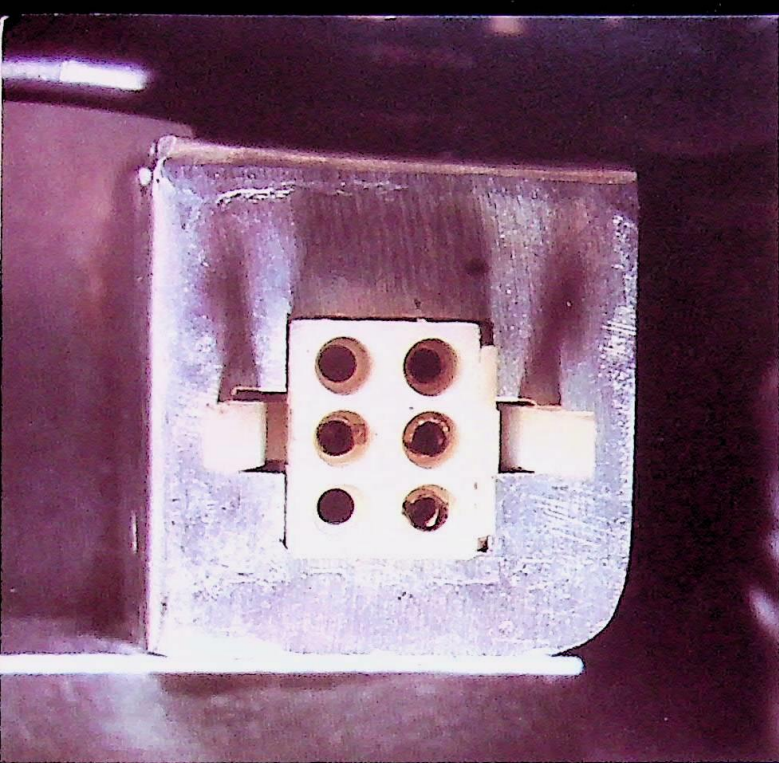
Safety extras:

Laminated windscreen, heated rear window, headlight wipers/washer, rear seat belts, Halogen fog light or additional Halogen headlight, tail fog light, second wing mirror.

Other extras:

Steel sun-roof, mechanically or electrically operated, tinted windows, various types of radio, polaris metallic paintwork, lockable glove compartment, lockable petrol filler cap.





The „BMW Programmtest“ is also carried out on the BMW 2002 turbo by means of 2 standard built-in electronic contacts: inspection of the entire electric circuit and all electrical units. Assessment of motor coefficients, i. e. ignition, dynamic supercharge, exhaust. The results are gathered in an inspection report – the BMW Electronic Test Sheet: an indispensable basis for optimum and individual tuning of the engine.

The turbo-charger is not complicated and needs no additional service. The reliable inspection and service on the BMW 2002 turbo is as problem free and timesaving as the supply of original BMW parts. The BMW 2002 turbo coordinates with BMW-service. Worldwide. In over 100 countries.

Technical Data

BMW 2002 turbo

Measurements and Weights

Torsionally rigid all-steel bodywork welded to floor assembly, 2-door saloon.

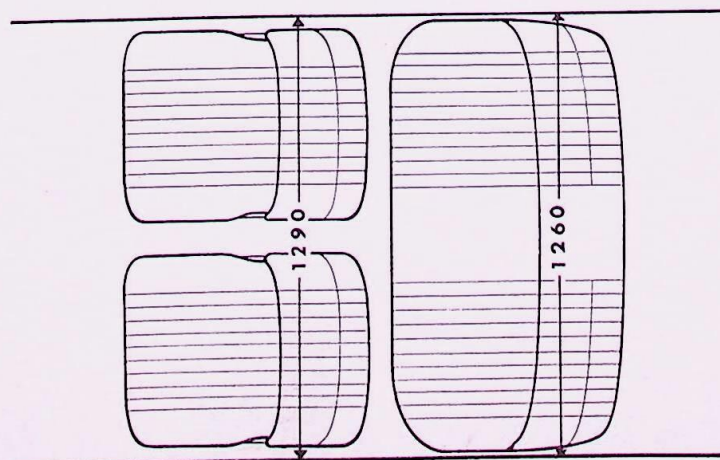
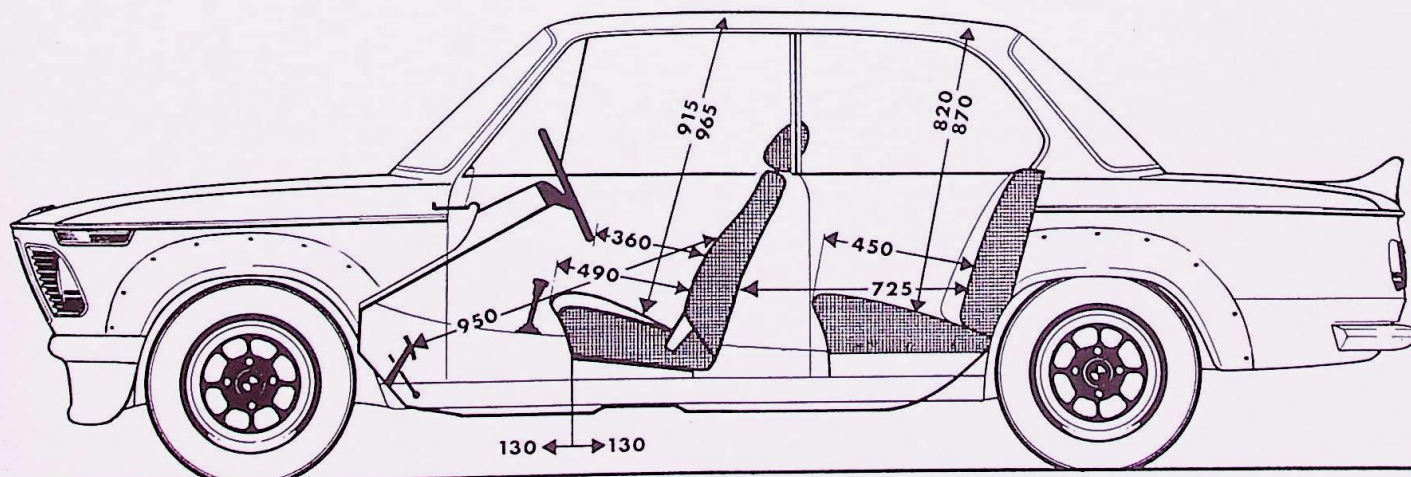
Length 4220 mm (166.14"), Width 1620 mm (63.78"), Height (unladen) 1410 mm (55.51"), Wheelbase 2500 mm (98.43"), Front track 1375 mm (54.13"), Rear track 1362 mm (53.62"), Turning circle 10.40 m (34.1 ft.), Door opening 1023 mm (40.30"), Width at shoulder height, front 1290 mm (50.78"), Width at shoulder height, rear 1260 mm (49.60"), Luggage compartment approx. 420 l (14.7 cu.ft), fuel tank 70 l (15.4 Imp.gal.), 6 l (1.32 Imp.gal.) reserve

Weight unladen 1035 kg (2282 lb.)

Permitted load 405 kg (893 lb.)

Permitted gross weight 1440 kg (3175 lb.)

Permitted roof load 75 kg (165 lb.)



BMW 2002 turbo

Engine, Transmission, Performance

4-cylinder, 4-stroke in-line engine with fuel injection system and exhaust turbocharger, triple-hemisphere swirl action combustion chambers, light alloy cylinder head, cross-flow principle, overhead camshaft, inclined overhead valves in V arrangement, pressure oil circulation with Eaton pump and full-flow oil filter, water cooled, oil cooler

5 bearing crankshaft with 8 counter weights

Capacity: 1990 cc (121.4 cu.in.)

Stroke: 80 mm (3.149")

Bore: 89 mm (3.504")

Output: 125.0 kW (170 BHP DIN) at 5800 rpm

Torque: 245 Nm (24.5 mkp) at 4000 rpm

Compression ratio: 6.9:1

Kugelfischer PL 04 fuel injection pump with automatic choke

Distributor with limiter and centrifugal advance

Three-phase alternator 12 Volt 630 Watt

Battery 12 Volt 44 Ah

Gearbox: 4-speed synchronmesh I 3.764; II 2.09; III 1.32; IV 1.0; R 4.096

Final drive 3.36 : 1

Limited slip differential 40% block

Maximum speed 211 km/h (131 mph)

Acceleration from 0 to 100 km/h (62 mph) in 6.9 sec.

Fuel consumption in accordance with DIN 70030: 10.5 l (2.3 Imp.gal.)/100 km

Average fuel consumption: 8.1 l (1.78 Imp.gal.)/100 km at 80 km/h (49.7 mph), 9.4 l (2.07 Imp.gal.)/100 km at 100 km/h (62 mph)

Suspension and Brakes

Front suspension: spring struts with wishbones, rubber mounted, coil springs

Rear suspension: independent: inclined semi-trailing arms, rubber mounted; coil springs, and additional rubber springing

Front and rear torsion stabilisers

Safety steering column, ZF-Gemmer steering system with worm and roller, 3-piece track rod. Overall steering ratio 17.57 : 1

Styled steel rims 5 1/2 J x 13 H 2

Tyres: 185/70 VR 13 radials

Dual circuit braking system with servo. Brake pressure limiter acting on rear wheels.

Front: Ventilated fixed caliper disc brakes with automatic pad wear compensation. Disc diameter 256 mm (10.08")

Equipment

Heating and ventilation: high performance fresh air heating with finely adjustable temperature control, 3-speed blower.

Air extraction through slots above the rear window. Demister vents for windscreen and front side windows

Front and rear spoiler, removable flared wing arches rear bumper, bonnet with spring release and safety lock

Front fully retracting crank windows and quarter lights, rear side opening windows, tinted wing mirror

Instrument panel with speedometer, mileage and trip recorder, rev. counter, turbocharger pressure gauge, Quartz clock, fuel gauge, water temperature gauge, cigar lighter, Halogen H4 headlights, (automatic cancellation when ignition is switched off) 2 reversing lights, interior light, automatic screen washers controlled from the steering column, 2-speed wipers with automatic time lapse mechanism, adjustable instrument panel lighting. Additional telltale warning lights for fuel and handbrake. Easily accessible storage facilities in glove compartment, on the instrument panel, in the central console. Safety ashtray in instrument panel, 2 ashtrays at rear. Fully carpeted passenger compartment. Arm rests on doors with integrated grab handle on right side, rear roof grab handles with clothes hooks. Sport bucket seats in the front with adjustable and removable head restraints. 3-point inertia reel safety belts. 3-spoke sports steering wheel with foam padding.

Optional Extras

5-speed gearbox, light alloy 6Jx13H2 sports wheels, laminated windscreen, heated rear window, 2-point automatic rear seat belts, second exterior overtaking mirror, Polaris metallic paintwork, velours floor mats. Lockable glove compartment, lockable petrol filler cap. Steel sun roof – mechanically or electrically operated. Halogen fog light, rear fog light, additional Halogen headlights. Headlight wipers/washers. Heat absorbing glass all round with laminated windscreen. Various types of radio, coloured body stripes.







BMW 2002 *turbo*

