



SILVER SPIRIT

The cars illustrated in this brochure have not been built to US specification. Your distributor will be pleased to supply the appropriate specification on request.

All Rolls-Royce and Bentley motor cars are subject to a continuous development programme and as a result their specifications may differ in detail from those outlined in this brochure. Your Rolls-Royce distributor will always have the latest information.

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**N**o Rolls-Royce motor car stems from a single blinding flash of inspiration. It emerges—over a number of years—by a process of evolution.

So it is with the Silver Spirit.

From a line of distinguished predecessors it inherits much that is tried and good and true. It inherits a unique tradition of patient, individual craftsmanship, responsibility and attention to detail. But just as traditional is its inheritance of forward-looking engineering.

What has emerged is a strikingly individual car—very obviously of today, yet timeless because its beauty of line springs from engineering truth rather than a stylist's pencil. A car that looks right and feels right in any surroundings, on any road in any conditions. A car that is, could only be, a . . . Rolls-Royce.





3500 TU



100 LG

# Every inch a Rolls-Royce

The timelessness of a Rolls-Royce motor car is a matter of record. Of all those built since 1904, over half are still giving pleasure to their owners. So it is reasonable to expect today's Silver Spirit to last for many years and the car is designed and constructed accordingly.

Long, low, purposeful lines go hand-in-hand with the new aerodynamic shape. Windows are curved and the glass area is one-third greater than on the previous model. There is a consequent feeling of spaciousness and all-round vision is improved. The wrap-around lighting clusters improve visibility by night; visibility of the way ahead for the driver, visibility of the car for other road users.

But much that makes the Silver Spirit an enduring

pleasure to own and to drive is not so simply demonstrated.

You will surely appreciate the superb ride which the new rear suspension provides; but there is little for the eye to latch on to. Simply looking at the gleaming alloy engine does little to explain how Rolls-Royce Motors engineers can design it to run 100,000 miles without major attention—a figure frequently exceeded in practice. Many of the measures that armour the car against corrosion and most of those that make it as safe as a car can be made are similarly hidden from the naked eye.

For, like every Rolls-Royce motor car ever built, the Silver Spirit is a mutually beneficial partnership of the best available answers to thousands of problems of detail, visible and invisible, large and small, vital and seemingly slight. A whole vastly greater than the sum of its parts.











# Take command

The moment you slip into the contoured driving seat of a Silver Spirit you are perfectly at home, completely in control.

At the touch of a small, eight position, 'joy-stick,' your seat moves electrically—up and down and through several degrees of tilt, as well as backwards and forwards. A refined rake mechanism has also been fitted, allowing your seat to be adjusted to exactly the position you require. Another 'joy-stick' control adjusts twin door mirrors with equal precision.

As well as being beautiful, the burr walnut-veneered fascia is intensely functional. Controls are conveniently to hand. Essential information is supplied through clear dials and a cluster of ten warning lamps, color-coded according to priority. The speedometer is electronic for silence and accuracy: for example, you can rely on the trip indicator to within nine yards in every mile. A quartz crystal digital clock indicates the time of day. Outside temperature and elapsed time since the start of your journey are also displayed on a digital panel. The engine sump oil level can be checked by an indicator which is integral with the fuel gauge.

Visibility through the large screen is excellent, even in wet weather when the large size wiper blades sweep a rectangular area in front of you—not the usual meagre half moon. A channel below the screen drains water away quickly: deflectors at each side help keep windows and door mirrors clear.

When you move away, response from the 6.75 litre, V-8 engine, with its hydraulically controlled automatic transmission, is swift and positive. The electric gear range selector is quiet and precise. The power-assisted rack and pinion steering is positive as well as light. Disc brakes, 11 inches in diameter, on all four wheels are operated by duplicated powered hydraulic systems which stop you surely and safely. The parking brake is foot operated with a hand release under the dashboard. A transmission lock is automatically introduced as soon as the ignition key is withdrawn. The ride is quiet, smooth, free from vibration and the car's behaviour always predictable, always forgiving.

If you have not driven a Rolls-Royce before, the Silver Spirit will prove a total revelation. If you have, the extent of the improvements effected will be immediately obvious.



▲ Controls are laid out for ease of access.



▲ Seats and external mirrors controlled from centre console. ▼



▼ Automatic air conditioning controls.

Ten-way warning light cluster. ▼



▼ Ambient temperature, time and journey time display.





# Eyes and hands

**A**s you would expect, advanced and infinitely patient engineering is a major strength of the Silver Spirit. Examples abound of new concepts, in design, in materials, in construction technique.

In many areas, however, there is no substitute for natural materials and the traditional skills of the craftsman—for the sharpness of his eye and the sureness of his hand.

That is why the exquisite burr walnut veneers for the facia are chosen by a cultivated eye and cut by hand. Up to eight invisibly joined slivers of veneer, polished to an amber lustre that looks like glass and is almost as hard, may go into a single panel. The right side will mirror the left and no other car will have an identical pattern.

Highest quality leather is another traditional feature of Rolls-Royce motor cars. In each Silver Spirit there are eight carefully-matched hides, cut, shaped, smoothed and sewn to perfection. Optional colour-matched, high quality velour fabrics are also available. The same leather trims the deep-pile Wilton carpets. Their combination of luxurious comfort and tough, practical utility comes from the fleece of particularly hardy sheep.

The lustre of the Silver Spirit, incomparable in durability, is a tribute to craftsmanship, perfectionist engineering and wisely chosen materials. Vulnerable areas of the underside are protected against corrosion by zinc-coated steel. Joints sealed and smoothed. Sub-frames sprayed with corrosion-resistant oil. Some 70 lbs of anti-drumming compound is applied to the underside.

Final finishing begins with eleven separate treatments designed to inhibit corrosion and to prepare the body surface. As many as ten, sometimes more depending on colour, coats of paint follow, most of them hand rubbed, building up to a protective layer two-and-a-half times thicker than that on most cars and, not surprisingly, a deeper, richer, longer-lasting gleam.

The final touch: a sweeping coachline, deftly applied by hand, eye—and a small camel-hair brush.



Inside the Silver Spirit all is harmony, everything in it is pleasing to the eye, pleasant to the touch and convenient to the hand. The large glazed area and window curvature create an overwhelming sense of light and space. An impression accentuated by the softly rounded and padded surroundings.

Seats are carefully contoured and given additional resilience by a new system of trampoline springing. Moulded supporting wings help fight fatigue and cradle you securely on any road, in any driving conditions. You may choose between the traditional all-leather or leather with colour-keyed textile facings.

You will be neither too hot nor too cold. The Silver Spirit has a two-level air-conditioning system which is unique to Rolls-Royce. Either level is adjustable separately between 17°C and 33°C and once set the controls need never be touched again. Front and rear screens are provided with automatic de-misting and de-icing facilities capable of keeping them completely clear in any weather conditions.

The ride is better than you will have experienced ever before and you travel in virtual

silence unless you choose to switch on the stereophonic radio or cassette tape player. The aerial rises automatically when the radio is switched on. The choice of wavebands includes FM, backed by an ingenious anti-interference



circuit. Four, door-mounted speakers and sophisticated controls provide fidelity that would not disgrace a concert hall.

The luggage compartment is fully carpeted and automatically secured through the centralized



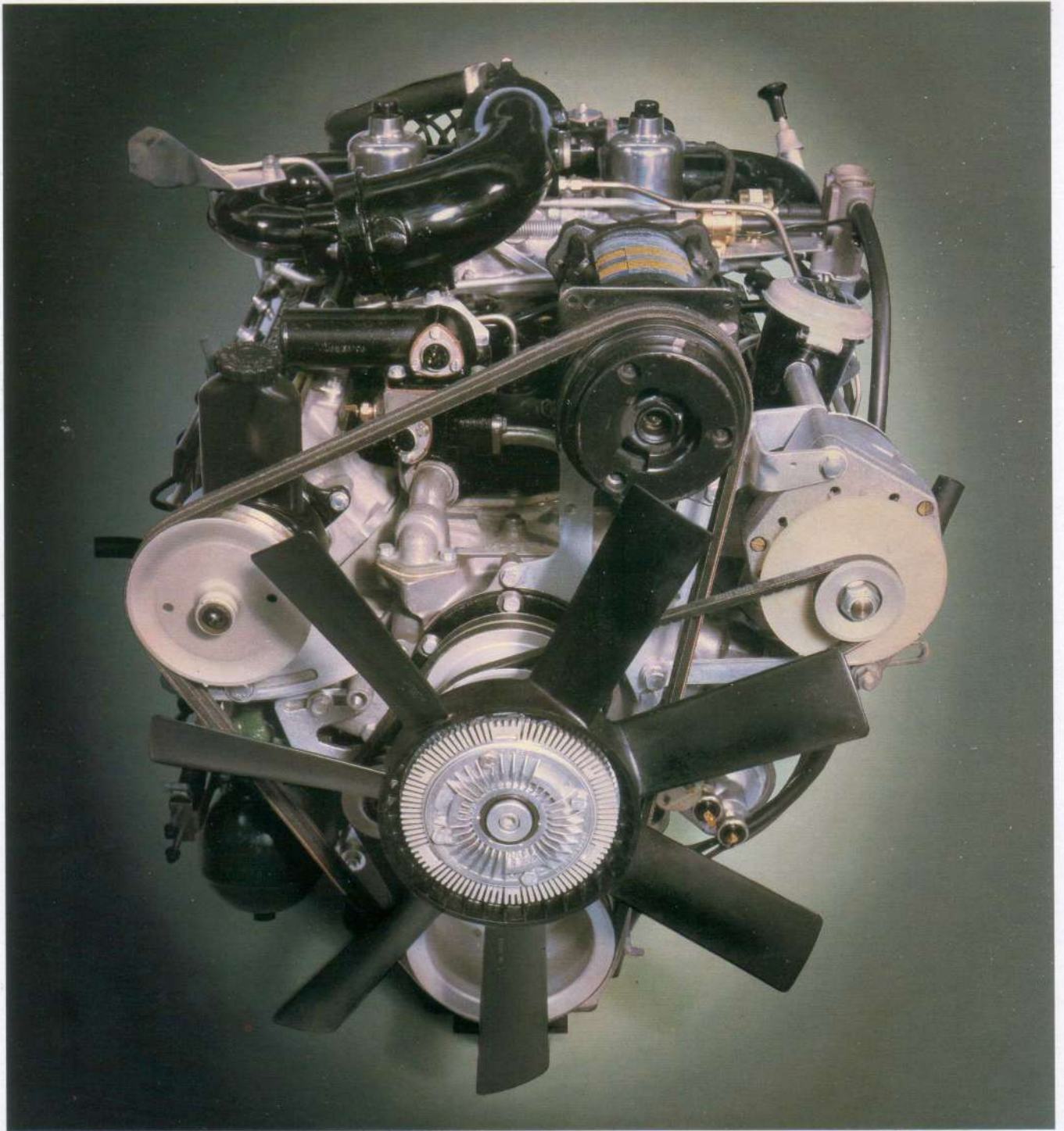
locking system. The tool storage compartment is situated conveniently above luggage height. Access is easy and lifting minimised because the central section of the light cluster which extends across the rear of the car is actually part of the luggage compartment lid and rises with it. The 28.5 US gallon fuel tank is situated behind the rear bulkhead and so does not intrude into the luggage space.

Care is taken to promote safety. The passenger compartment is a steel shell, with impact absorbing sections fore and aft. Doors and side panels are reinforced against intrusion. When doors are opened a warning light on the trailing edge of each door is automatically illuminated.

A new integrated system of seat belts, designed especially for the Silver Spirit, is particularly simple to use. As well as superior safety, comfort and convenience, it offers improvements in appearance.

With the removal of stress and the ease of control it provides, the interior design of the Silver Spirit makes a direct and valuable contribution to safety. That, too, is part of its purpose.





# Technology

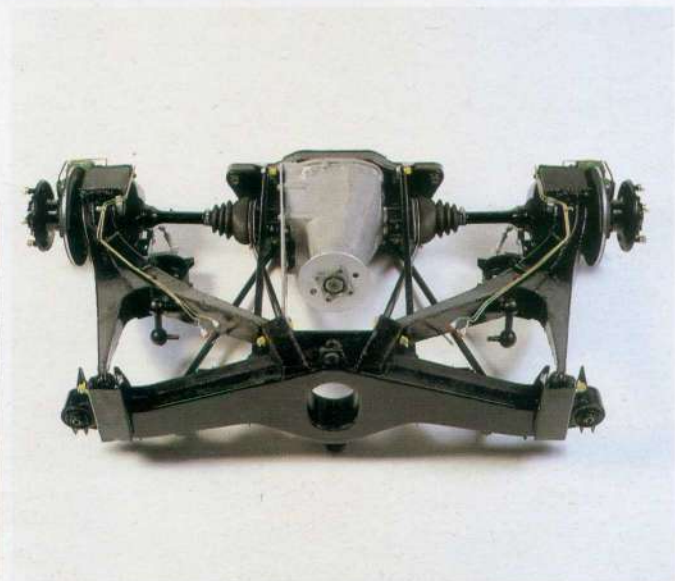
**D**evelopment of the Silver Spirit took a full eight years, despite the long and distinguished service histories of many of the components.

It inherits, for example, the Rolls-Royce rack-and-pinion power steering, as remarkable for response and 'feel' as it is for lightness.

Over the years, ride and road-holding have been improved by the introduction of compliant front suspension and many other modifications including the fitting of large-section steel-braced radial tires.

Now, re-design of the rear suspension enables the potential of these developments to be fully exploited. The new geometry improves cornering and ride still further, and also—in co-operation with new gas springs and rubber mounts—adjusts the ride to the load conditions.

This considerable technological advance required a lengthy development programme. Yet much of the testing took place on a bump rig originally designed by Sir Henry Royce himself. Nobody has been able to devise anything better, so it continues in use.





The lightly stressed 6.75 litre V-8 engine is inherently smooth-running, silent and particularly durable. These characteristics are improved still further through careful construction and by advanced engineering. Tappets are hydraulic and the crankshaft now has larger bearings for even greater durability; new engine mounts make for quieter running. There are two asymmetric fans, one engine-driven, the other electric.

But technology does not have to be spectacular. If comfort, convenience and safety could be improved, it has been.

A touch of a foot pedal applies the parking brake.

The fuel filler compartment cover opens at the touch of a button on the fascia: but not if you have forgotten to switch off the engine. The filler cap cannot jam; a ratchet device prevents it being overtightened.

The design of the pin tumbler door locks was inspired by one made in Egypt nearly 4,000 years ago. Each lock has five pins; it is assembled by hand, extremely difficult to pick and the chances of a forger producing a correct duplicate key are about 24,000 to one against.

The central door-locking system has new, two-position locks. Turning the key to the first position locks the door concerned: turning it to the second position locks the other three.

The four window buttons are smooth and capless to discourage any attempt to break in. A successful intruder would face an equally stiff hurdle. When the key is withdrawn the automatic transmission is electrically locked. Only its own key will release it.

Above all, the Silver Spirit is a superb example of a successful marriage of tradition and technology.

The classic radiator, the Spirit of Ecstasy mascot and many other traditional hallmarks of a Rolls-Royce motor car are as much in evidence as ever. But now they find a natural setting in a new, spacious, elegant shape that provides greater safety, quietness, smoothness and power, comfort, reliability and longevity that you expect even in a car from Rolls-Royce. That is the technological triumph of the Silver Spirit.



# Specification

## Rolls-Royce Silver Spirit and Bentley Mulsanne

Five seat, four door saloon of steel integral construction. Wrap around bumper with hard polyurethane inserts. Individual front seats electrically adjustable for height, tilt and fore and aft movement. Squab manually adjustable. Upholstery in English hide. Deep pile carpets. Lambswool rugs. Walnut veneer fascia and capping rails. Vanity mirrors in rear quarters. Headrests to rear seats. Front seat head restraints.

Instruments: electronic speedometer, 12 hour digital clock, digital ambient temperature gauge, digital elapsed time indicator, combined fuel and oil level indicator, oil pressure gauge, ammeter and engine coolant temperature gauge. Warning lamps for low pressure in hydraulic systems, low hydraulic fluid level, stop lamp bulb failure, low fuel level, seat belt fastening, icing conditions, parking brake, oil pressure, ignition, engine overheat, low coolant level, low washer fluid level. Automatic speed control system (electronic), controlled from switch on gear range selector lever.

### Engine

412 in<sup>3</sup> (6750 cc) 90°V-8 with overhead valves and hydraulic tappets. Bore 4.1 in (104.1 mm). Stroke 3.9 in (99.1 mm). Compression ratio 8.0:1. High silicon content aluminium alloy cylinder block with cast-iron wet liners, aluminium alloy cylinder heads. Hardened steel crankshaft runs in five main bearings. Full flow oil filter. Cooling system pressurized to 15 lbf/in<sup>2</sup> (1.035 bars). Water pump mounted 7 blade fan with electric booster fan behind radiator. Electronic ignition. Exhaust system with stainless steel silencers and catalytic converter.

### Fuel System

Bosch K Jetronic continuous fuel injection system. Single Pierburg electric fuel pump. Fuel tank 28.5 US gal.

### Transmission

Three speed automatic transmission with torque converter. Electric gear range selector. Single piece propeller shaft. Hypoid bevel final drive. Overall ratios: 1st 7.70:1, 2nd 4.62:1, 3rd 3.08:1, reverse 6.16:1. Top gear speed at 1000 rev/min: 26.2 mile/h (42 km/h).

### Suspension

Front—independent by lower wishbone, compliant controlled upper levers, coil springs, telescopic dampers, anti-roll bar and anti-dive characteristics. Rear—independent by semi-trailing arms, suspension struts, gas springs and anti-roll bar. Automatic ride height control using Hydraulic System Mineral Oil as the fluid medium.

### Steering

Power assisted, rotary valve integral rack and pinion. Energy absorbing collapsible steering column. Overall ratio: 16.9:1. Turns of steering wheel lock-to-lock 3.25. Turning circle kerb-to-kerb: 37.4 ft (11.5 m). Steering wheel 15.28 in (388 mm) diameter.

### Wheels and Tyres

15 in (381 mm) diameter pressed steel disc wheels, 5 studs and spherical seating nuts to each wheel. Dunlop D7 235/70 HR 15 steel braced, radial ply or Michelin XVS 235/70 HR 15 steel braced, radial ply.

### Brakes

11 in (280 mm) diameter discs on all four wheels, ventilated at front. Two independent power braking hydraulic circuits using Hydraulic System Mineral Oil as the fluid medium. Pressurized by engine driven pumps to 2500 lbf/in<sup>2</sup> (172.5 bars). Mechanical parking brake operated by a foot pedal with a separate hand release.

### Air Conditioning System

The Rolls-Royce Motors automatic two-level air-conditioning system supplies heated or cooled air to the car interior through independently ducted upper and lower systems. Swivelling ventilators and central air outlet on fascia. Stale air extraction via luggage compartment to atmosphere. System automatically controls rear window demister.

### Electrical Equipment

12V negative earth fully fused. 75 amp alternator, 68 A/h battery. Pre-engaged starter motor. Lamps: US standard headlamps. Inner lamps 12V 50 W sealed beam. Outer lamps 12V 60/40 W sealed beam. Safety circuit to give dip if main beam fails. Hazard warning system. Parking lamps at front, combined parking, reversing and stop lamps at rear. Windscreen washers, with wash/wipe system, two-speed and delay wipers. Electrical operation of gear selection, front seat adjustment, windows, door mirrors, centralized door and luggage compartment locking system, radio aerial, petrol filler flap, interior courtesy lamps with 7-second delay, cigar lighters.

### Audio Equipment

AM (MW) and FM, (VHF) Stereophonic radio. Stereophonic cassette tape play unit, four speakers, with front/rear balance control.

### Dimensions

	in	mm
A	58.5	1485
B	120.5	3061
C	Bentley = (209.2) 207.75	(5313) 5277
D	36.0	914
E	36.0	914
F	16.0	406
G	14.0	355
H	14.0	355
J	15.5	393
K	34.0	863
L Excluding door mirrors	74.0	1887
Overall seat widths	53.5	1359
Interior width	58.2	1479
Luggage compartment width	61.0	1549

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