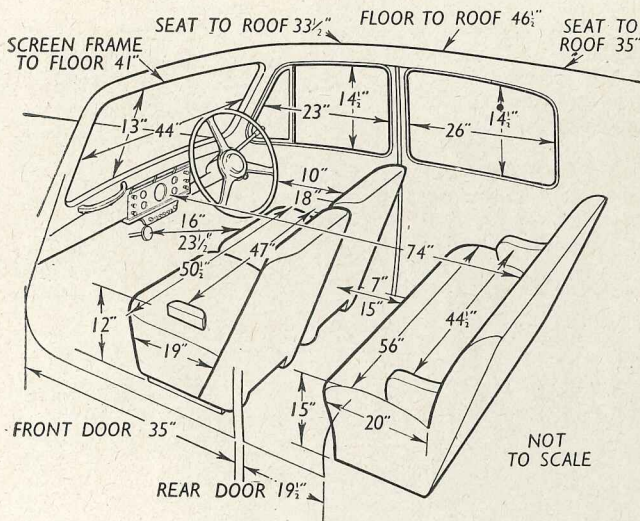
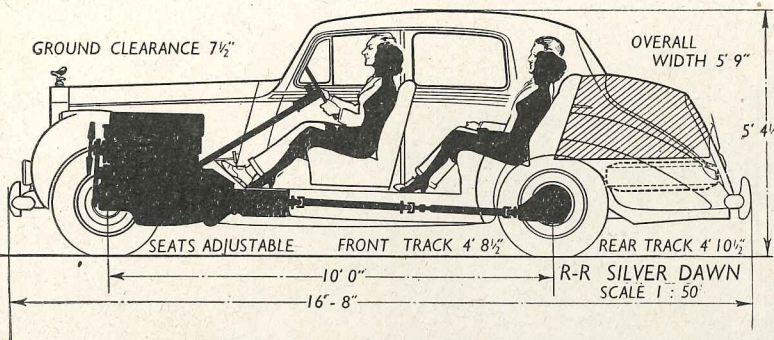


The Motor Road Test No. 16/54 (Continental)

Make: Rolls-Royce **Type:** Silver Dawn Saloon (Automatic Gearbox)
Makers: Rolls-Royce, Ltd., 14-15, Conduit Street, London, W.1.



Test Data

CONDITIONS: Dry concrete road weather mild with moderate cross-wind. English and Belgian premium-grade fuel.

INSTRUMENTS

Speedometer at 30 m.p.h.	.. .. .	3% slow
Speedometer at 60 m.p.h.	.. .. .	accurate
Speedometer at 90 m.p.h.	.. .. .	accurate
Distance recorder	.. .. .	1% fast
		(trip 3 1/2% slow)

MAXIMUM SPEEDS

Flying Quarter Mile	
Mean of four opposite runs	.. .. . 94.0 m.p.h.
Best time equals	.. .. . 94.7 m.p.h.

Speeds in gears (governed by automatic gearbox)

Max. speed in 3rd gear	.. .. . 57 m.p.h.
Max. speed in 2nd gear	.. .. . 30 m.p.h.
Max. speed in 1st gear	.. .. . 19 m.p.h.

FUEL CONSUMPTION

24.5 m.p.g. at constant 30 m.p.h.
 22.5 m.p.g. at constant 40 m.p.h.
 21.5 m.p.g. at constant 50 m.p.h.
 19.0 m.p.g. at constant 60 m.p.h.
 16.0 m.p.g. at constant 70 m.p.h.
 13.0 m.p.g. at constant 80 m.p.h.
 Overall consumption for 769 miles, 50 gallons, equals 15.4 m.p.g. Fuel tank capacity 18 gallons.

ACCELERATION TIMES from rest

0-30 m.p.h.	.. .. . 4.9 sec.
0-40 m.p.h.	.. .. . 7.4 sec.
0-50 m.p.h.	.. .. . 10.8 sec.
0-60 m.p.h.	.. .. . 15.2 sec.
0-70 m.p.h.	.. .. . 21.2 sec.
0-80 m.p.h.	.. .. . 29.2 sec.
0-90 m.p.h.	.. .. . 48.2 sec.
Standing Quarter Mile	.. .. . 20.0 sec.

ACCELERATION TIMES from rolling start

10-30 m.p.h.	.. .. . 3.5 sec.
20-40 m.p.h.	.. .. . 4.6 sec.
30-50 m.p.h.	.. .. . 6.0 sec.
40-60 m.p.h.	.. .. . 7.8 sec.
50-70 m.p.h.	.. .. . 10.3 sec.
60-80 m.p.h.	.. .. . 14.1 sec.
70-90 m.p.h.	.. .. . 26.7 sec.

WEIGHT

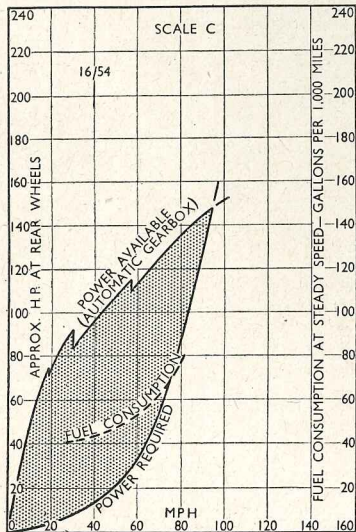
Unladen kerb weight	.. .. . 37 1/2 cwt.
Front/rear weight distribution	.. .. . 49/51
Weight laden as tested	.. .. . 41 cwt.

HILL CLIMBING (At steady speeds)

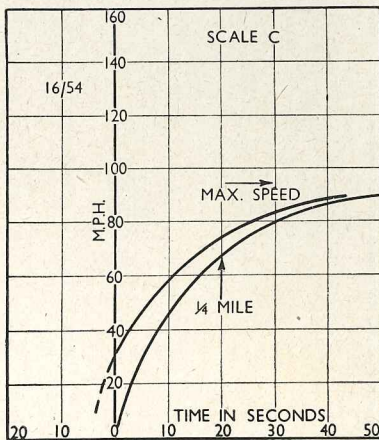
Max. top gear speed on 1 in 20	.. .. . 83 m.p.h.
Max. top gear speed on 1 in 15	.. .. . 80 m.p.h.
Max. top gear speed on 1 in 10	.. .. . 67 m.p.h.
Max. gradient on top gear	.. .. . 1 in 8.0 (Tapley 275 lb./ton)
Max. gradient on 3rd gear	.. .. . 1 in 5.4 (Tapley 405 lb./ton)
Max. gradient on 2nd gear	.. .. . 1 in 4.0 (Tapley 545 lb./ton)

BRAKES at 30 m.p.h.

0.93 g retardation (= 32 1/2 ft. stopping distance) with 50 lb. pedal pressure.
 0.46 g retardation (= 65 1/2 ft. stopping distance) with 25 lb. pedal pressure.



Drag at 10 m.p.h. approx. 48 lb.
 Drag at 60 m.p.h. approx. 212 lb.
 Specific fuel consumption when cruising at 80% of maximum speed (i.e. 75.2 m.p.h.) on level road, based on power delivered to rear wheels approx. 0.59 pints/b.h.p./hr.



Maintenance

Sump: 16 pints, S.A.E. 20. **Gearbox:** 20 pints, type AQ/ATF Castrol TQ, Donax T6, Mobil 200. **Rear Axle:** 1 1/2 pints Hi-press S.C. (S.A.E.90). **Steering gear:** S.A.E.30 oil. **Radiator:** 32 pints (3 drain taps). **Chassis lubrication:** By pedal, one-shot system, 2 pints S.A.E.30. **Ignition timing:** T.D.C. **Spark plug gap:** 0.030 in. **Contact breaker gap:** 0.019 in. to 0.021 in. **Valve timing:** Inlet opens 10° A.T.D.C. **Tappet clearances (cold):** Inlet 0.006 in. Exhaust 0.012 in. **Front wheel toe-in:** 1/8 to 1/4 in. **Camber angle:** 1° out with two passengers in front seats. **Castor angle:** Plus 3° to minus 1°. **Tyre pressures:** Front 24 lb. Rear 33 lb. **Brake fluid:** Lockheed orange. **Battery:** 12 v. 55 amp./hr. **Lamp bulbs:** Head lamps: O/S 12v. 48 watt; (Lucas pre-focus axial filament); N/S, 48/48 watt; Lucas pre-focus transverse filaments); Fog lamps, 48 watt; Side, 3 watt; stop/tail lamps, 24/6 watt; number plate, 3 watt; reversing, 6 watt; instruments, 2.4 watt; interior roof light, 6 watt; direction indicators, 3 watt festoon. The following bulbs are 16 v. 3 watt — warning lights, map lamp and boot lamp.

The ROLLS-ROYCE Silver Dawn

A Fast and Silent Car Designed for the Discriminating Driver

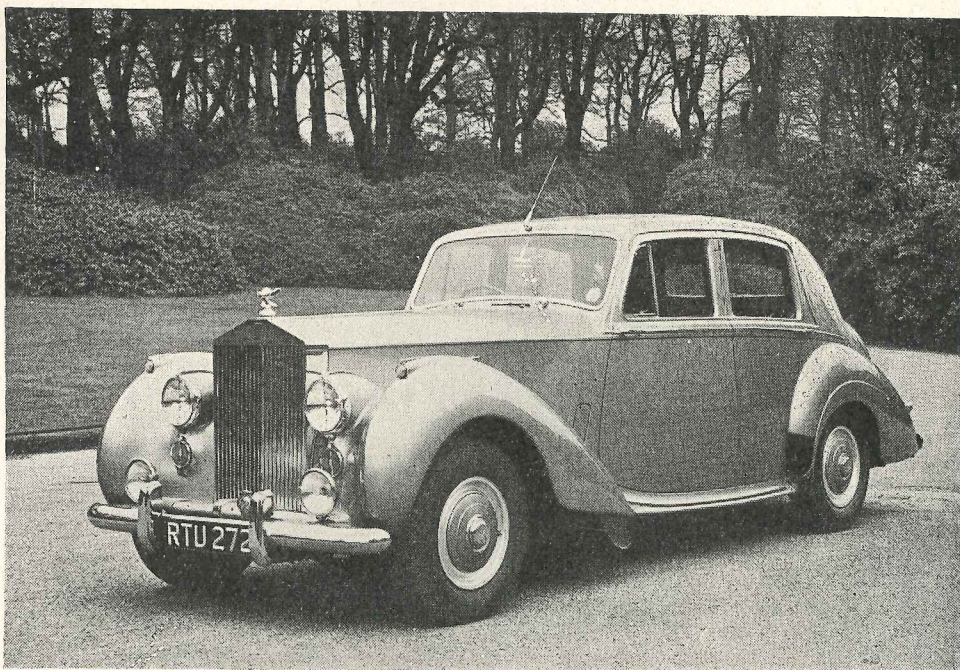
UNMISTAKABLY a Rolls-Royce, the Silver Dawn is nevertheless a compact vehicle entirely suitable for the owner-driver.

THIS year the Rolls-Royce Co. celebrate their jubilee and it is therefore more than usually interesting to examine the car which they offer today as the Silver Dawn model.

The problem which faces the Rolls-Royce Co. when producing a new model has never been a simple one. The very name conjures up superlative engineering and comparatively high first cost. Moreover, such cars may well be handled by the professional chauffeur more often than by the private owner so that suspension becomes of great importance to the rear-seat passenger, and luggage accommodation is another factor necessitating considerable attention on behalf of the designers. The 1954 Silver Dawn, which has recently been placed at our disposal for a prolonged test in Britain and on the Continent, combines to a remarkable extent the charm and grace of the traditional Rolls-Royce with an ability to satisfy the enthusiastic and intelligent owner-driver. Indeed, so well have these features been blended that one is left with a feeling that here is perhaps the finest owner-driver car yet to emerge from the distinguished factory, and perhaps the first Rolls-Royce which may be said to combine all the anticipated qualities with many of those normally attributed only to a high-grade sports car.

The Automatic Gearbox

As may be seen from the photographs the Silver Dawn is a handsome car, well proportioned and characteristically British. What cannot be detected from an exterior view is the combination of the 4½-litre engine with an automatic gearbox possessing certain overriding controls. The result makes the lazy or inexperienced driver something of an expert without removing the scope for subtlety on the part of the intelligent conductor; indeed, the latter, by suitable use of the accelerator and overriding controls can produce almost every



variety of transmission behaviour from the equivalent of touring use to typical sports-car handling—and all with a degree of silence and safety which is intensely satisfying. To these facets of the automatic transmission's behaviour must be added the great appeal—to the inexperienced and expert alike—of clutchless control in dense traffic.

To obtain the best from the Silver Dawn necessitates a complete understanding as to the potential of the automatic gearbox. If the small lever which

off, but so well is the automatic transmission arranged that once the engine is running the very mood of the driver can be interpreted by the accelerator pedal. If the car is accelerated in a normal manner then the gear-shift operates almost imperceptibly at comparatively low speeds. Thus by the time 30 m.p.h. is attained the Silver Dawn is in top gear and well able to accelerate from there into the 90s. If, on the other hand, urgency of business, competitive spirit, or desire to use the massive power available to its fullest extent is felt, then a wide open throttle holds each gear in engagement until maximum useful r.p.m. are reached. Driven thus the progress is such that no one except the most experienced racing driver would be likely to better the automatic action which engages successively the higher gears until top cuts in at a figure approaching a mile a minute.

In addition to this dual personality the Silver Dawn has several more unique possibilities for the experienced driver. A "kick-down" of the accelerator pedal will drop the car from top to third gear instantaneously provided the speed is appropriate. If such tactics prove unwise, as for instance when approaching an unexpectedly sharp corner on a slippery surface, then the small lever beneath the steering wheel can be moved into position 3, and when this is done the gear will change down instantaneously, at speeds as high as 50 m.p.h., into third gear. This third position produces another most interest-

In Brief

Price: £3,320 plus purchase tax £1,384 9s. 2d. equals £4,704 9s. 2d.

Capacity	4,566 c.c.
Unladen kerb weight	37½ cwt.
Fuel consumption	15.4 m.p.g.
Maximum speed	94.0 m.p.h.
Maximum speed on 1 in 20 gradient	83 m.p.h.
Maximum top gear gradient	1 in 8
Acceleration :	
10-30 m.p.h.	3.5 sec.
0-50 m.p.h.	10.8 sec.
Gearing : 22.4 m.p.h. in top at 1,000 r.p.m.;	
74.5 m.p.h. at 2,500 ft. per min. piston speed.	

is mounted under the steering column is moved from neutral to a position marked as No. 4 the car is thenceforth automatically controlled by accelerator and brake. There is no clutch pedal and the transmission is relayed by a fluid coupling which does away with any necessity for the usual pedal type of control. The engine cannot be started unless the lever is in neutral, thereby overcoming any risk of an unexpected and possibly disastrous take-

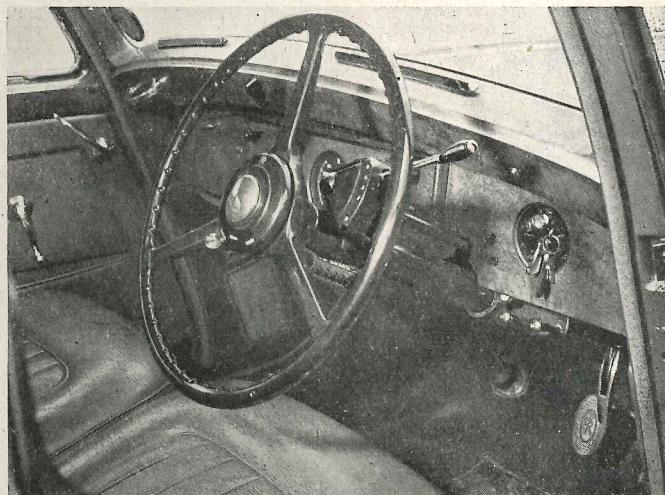


The Rolls-Royce Silver Dawn

AS IS EXPECTED, the coachwork finish employs the finest leather and woodwork which combine to provide a practical and luxurious interior.

The servo, so admirable on all other occasions, has a slightly delayed action at these very low speeds with result that a relatively heavy pressure is momentarily called for and, if this is not relieved as the servo takes effect, the car may be brought to rest with something of a jerk.

Such combination of acceleration, deceleration and maximum speed would be useless in a chassis lacking ability to stay on the road under varied conditions of surface and speed or in which the steering could be faulted in any way. The present Silver Dawn is in effect a remarkable example of what can be



ing combination. With the lever left there it is possible to drive through twisting or mountainous roads and gain the full benefit of a gearbox which changes down at 55 m.p.h. and upwards at 60 m.p.h. entirely automatically. Finally, when confronted with a prolonged and steep descent, or when manoeuvring in exceptionally heavy traffic, position 2 undertakes that only first and second gear are operative and no inadvertent change up is possible under these circumstances. There is, of course, an additional lever position which engages reverse.

Skill Rewarded

There must be many Rolls-Royce owners who regard the manually operated gearbox as a strong feature of a magnificent car. They will recall how when gearboxes were noisy and their manipulation difficult Rolls-Royce always provided immaculate operation. Such connoisseurs may well find that the alternative offering of a standard Rolls-Royce gearbox is still entirely to their liking and they may be inclined to dismiss the automatic transmission as something which does not justify the attention of the expert and is not in keeping with so traditionally a motorist's car. To these we can only say that in its latest form the automatic gearbox requires a certain amount of skill and precision if the very best and smoothest results are to be obtained, but that in so doing the experienced driver will average a higher speed in greater safety than would be probable with the more orthodox type of transmission. Moreover, the freedom from physical activity associated with the

BRAKE PEDAL and dipper switch share the front floor of the car. Control of the automatic gearbox is obtained by use of the lever on the steering column.

gear-change lever allows the driver to concentrate more fully on the essential art of conducting the car in a safe and rapid manner on the congested roads of the present day, and it is difficult to conceive at this moment a car more pleasing to the driver and safer in every way than the latest Silver Dawn equipped with the automatic gearbox.

Only in one respect was the behaviour of the transmission open to criticism. On the car tried, the automatic engagement of first gear at 3-4 m.p.h. as the car was brought to rest produced a slight jerk which, in the absence of a clutch, it was impossible to avoid.

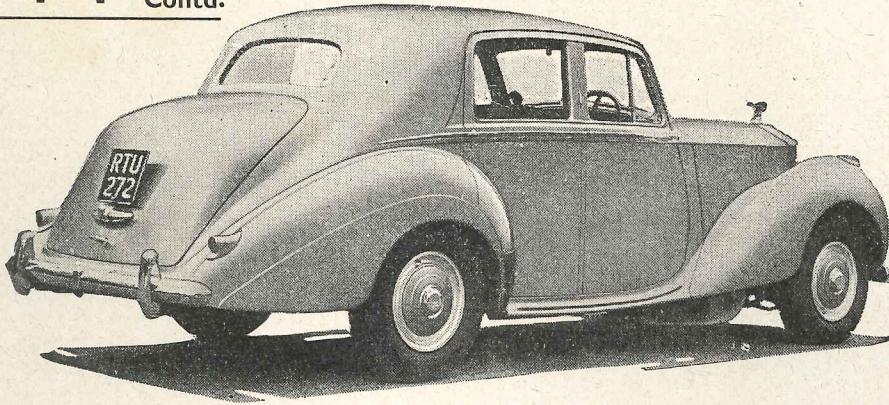
A car which weighs close on two tons and which is capable of reaching 90 m.p.h. in a comparatively short distance must have superlative brakes. The Rolls-Royce servo system has benefited from extensive trial in a prototype considerably faster than any touring vehicle yet placed on the market. At first the luxury of a low pedal pressure combined with the most powerful retardation can be disconcerting, but within a few hours the lesson is learnt and the car may be checked from the highest speeds with little more than a caress of the foot.

A criticism does, however, exist if the brakes have to be applied for a quick stop from a walking pace or less.

achieved by steady development engineering. In its original form the car which we were able to sample extensively in the Middle West of America did not seem to match up to the highest specification of road-holding and steering. Now, four years later, various modifications, coupled with a redesigned rear end, have transformed the handling qualities of the Silver Dawn. It is, in fact, a car which can be enjoyed not only on the lazy days but during those brief and memorable occasions when circumstances warrant the highest available speed. The present steering has a strong castor action which calls for some degree of effort and there is a certain amount of reaction through the wheel on bad surfaces, but these are small penalties to pay for the delightful responsiveness and "feel" which the steering possesses.

There cannot be a faultless vehicle, and the Rolls-Royce is no exception. The headlights, although well equal to the speed of the car, are unusual in as much as they throw a concentrated beam down the centre of the road and do not permit sufficient view of the gates and intersections of the highway. The heating arrangements for the interior of the car are most elaborate, involving as they do a separate blower for wind-screen demisting and interior warmth.

Contd.



THE THREE-QUARTER rear view shows off to advantage the well-balanced lines of the Silver Dawn and the lengthened tail.

In both these functions they fall short of the equipment offered on many medium-priced British motorcars today. The main heater which is under the passenger's seat is noisy and slow to prove effective. On a bitterly cold morning the owner wishes to obtain maximum heat in minimum time and having failed to do so will not be best pleased to find that the demisting gear is also tardy in operation by modern standards, noisy in its early stages of operation and not entirely effective as to final results. By contrast, the arrangement for demisting the rear window, which is electrical, works extraordinarily well and quickly, and must be rated as the most satisfactory device of its kind we have yet encountered.

From the driver's point of view the forward vision is excellent. Both front wings can be seen and the seating is sufficiently upright to make a long

journey at high speeds comfortable and safe. The horn is deceptive in its power when heard from inside the car, but very adequate when applied to other traffic. The ride control which stiffens the rear shock absorbers is particularly useful when carrying heavy baggage, and the general degree of silence is of a high order and makes for restful travel. Opening the quarter lights produces a fair amount of wind roar but this is not strictly necessary as the ventilation system induces enough air to keep the interior fresh.

Improved Accommodation

Four occupants can be carried in comfort and five occasionally. Until a recent modification the Silver Dawn could be criticized on inadequate storage space, but now the new boot offers ample room for a great deal of luggage. Not only can the belongings of four passengers be housed within the boot but at each side of the platform there are most useful wells into which every conceivable sort of equipment from cameras to picnic baskets may be placed. The lid of the luggage locker is spring loaded and a measure of protection is given in bad weather to those unloading.

The Silver Dawn is very much an owner-driver's car. The pedal-operated lubrication system means that long periods can be allowed to elapse between visits to the service station, and when touring in mountainous country the sunshine roof will no doubt prove an added attraction. The rear seats are provided with small folding tables which are most useful for picnics, and above the control panel of the built-in radio set is a pull-out platform which serves the same purpose for the front seat occupants.

Throughout the entire car the finish and equipment, as might be expected, is of the highest order, and the life of the steel body should, with care equal that of the splendid chassis. In a world where mass production and standardization become increasingly fashionable the Rolls-Royce Silver Dawn stands out as a fine motorcar built by craftsmen for those who are prepared to pay more in their search for perfection.



CAPACIOUS and easily loaded, the improved boot on the Silver Dawn enables a great deal of luggage to be carried as well as providing useful wells for the lesser odds and ends. The spare wheel may be removed without disturbing the contents of the boot.

Mechanical Specification

Engine	
Cylinders ..	6
Bore, 92 mm. Stroke, 114.3 mm	Cubic capacity, 4,566 c.c. Piston area, 62.4 sq. in.
Valves ..	Overhead inlet, side exhaust
Compression ratio ..	6.75/1
Carburettor ..	Zenith downdraught
Ignition ..	Coil, 12v.
Sparkling plugs, Champion N8 or Lodge CLN	
Fuel pump ..	Twin S.U. electric
Oil filter ..	Full-flow
Transmission	
Clutch ..	Hydraulic coupling and automatic gearbox
Top gear ..	3.73
3rd gear ..	5.4
2nd gear ..	9.82
1st gear ..	14.23
Propeller shaft ..	Divided, open
Final drive ..	Hypoid bevel
Top gear m.p.h. at 1,000 r.p.m.	22.4
Top gear m.p.h. at 1,000 ft./min. piston speed ..	74.5
Chassis	
Brakes ..	Hydro-mechanical with mechanical servo
Brake drum diameter ..	12½ in.
Friction lining area ..	186 sq. in.
Suspension: Front ..	Coil and wishbone i.f.s.
Rear ..	Semi-elliptic
Shock absorbers:	
Front ..	Hydraulic
Rear ..	Hydraulic, with ride control
Tyres ..	6.50-16
Steering	
Steering gear ..	Cam and roller
Turning circle ..	41 ft.
Turns of steering wheel, lock to lock ..	3½
Performance factors	
(at laden weight as tested).	
Piston area, sq. in. per ton ..	30.4
Brake lining area, sq. in. per ton ..	90.8
Specific displacement, litres per ton mile	2,980
Fully described in <i>The Motor</i> , October 14, 1953	

Coachwork and Equipment

Bumper height with car unladen.	
Front (max.) 16½ in., (min.) 12½ in.	
Rear (max.) 17½ in., (min.) 13½ in.	
Starting handle ..	Yes
Battery mounting ..	Under floor beneath driver's seat
Jack ..	Screw-type
lacking points ..	Two external, under centre body pillars
Standard tool kit: Hub-cap spanner, wheel-brace, tyre pump, oil gun, three ratchet spanners, tommy bar, three d/e spanners, one s/e spanner, pliers, adjustable spanner, ignition spanner, screwdriver, tyre valve tool, one d/e box spanner, feeler gauge, tyre pressure gauge, spare sparking plug, three spare bulbs, drain plug key	
Exterior lights: Two side, two head, two stop/tail, number plate, twin reverse, twin foglamps.	
Direction indicators ..	Semaphore type (self-cancelling, time switch)
Windscreen wipers ..	Twin-blade, two-speed, self-parking Lucas
Windscreen washer ..	Yes
Sun visors ..	Two (n/s with vanity mirror)
Instruments: Combined fuel and oil contents gauge, ammeter, clock, oil pressure gauge, thermometer, speedometer with decimals and trip.	
Warning lights: Ignition, fuel level, high beam.	
Locks:	
With ignition key ..	n/s front door, luggage boot, glove locker, tool tray, master switch
With other keys ..	Nil
Glove lockers ..	One
Map pockets ..	Four, on doors
Parcel shelves ..	Nil
Ashtrays, Three ..	Cigar lighters, Two
Interior lights: 4 (roof, map-reading, two in rear quarters and luggage boot)	
Interior heater ..	Smiths recirculating, also independent screen demister unit and built-in demister element in rear window
Car radio ..	His Master's Voice
Extras available: Bench front seat, fitted suitcases (6)	
Upholstery material ..	Leather
Floor covering ..	Pile carpet
Exterior colours standardized: Cellon blue, black pearl, Tudor grey, shell grey, midnight blue, black, metallic silver, Lugano blue, Donegal blue, velvet green, diadem maroon.	
Alternative body styles: Saloon with synchro-mesh gearbox. Also coachbuilt bodies on Silver Dawn and longer Silver Wraith chassis.	