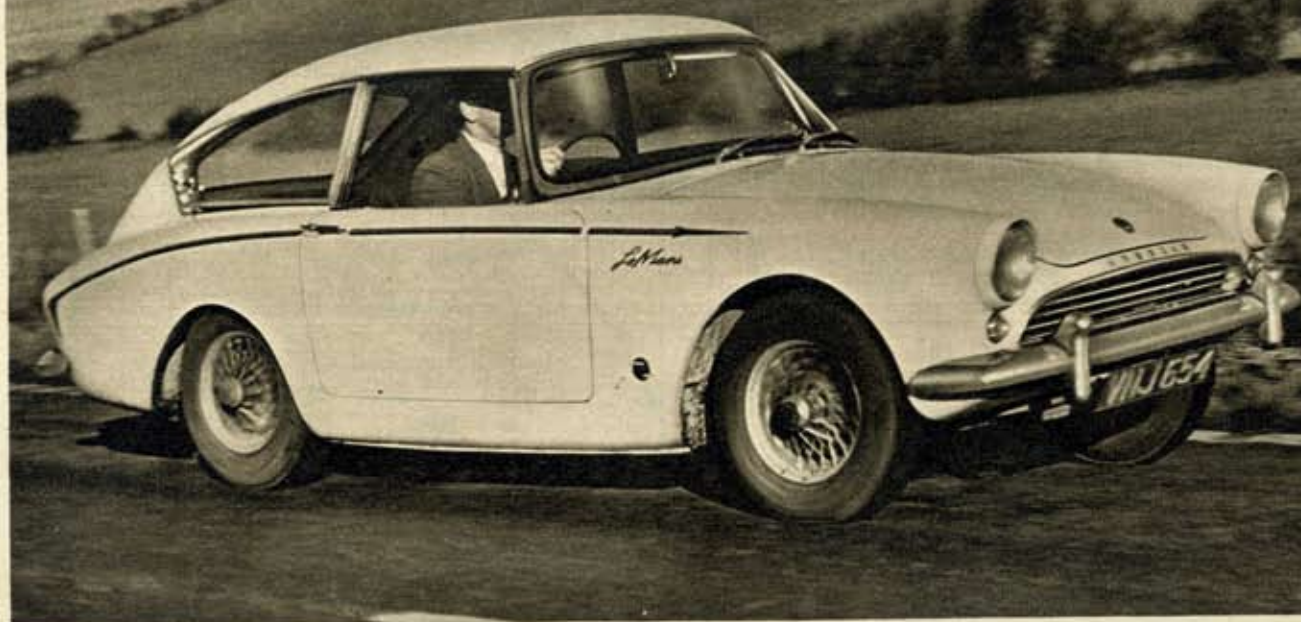


AUTOCAR, 16 FEBRUARY 1962

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Sunbeam Harrington Le Mans 1,592 c.c.

MORE than one firm that is now internationally famous started life by adapting a current production car to suit its own ideas. Thomas Harrington Ltd., of Hove, have been coachbuilders for many years, but it is less than 12 months since this concern announced the first of its restyled Rootes Sunbeam Alpines. A test of one of these was published in *Autocar* of 23 June, 1961.

At just about this time a new prototype body appeared and was fitted to one of the Alpines which ran in the Le Mans 24-hour race; this car won the Index of Thermal Efficiency. Harrington decided to go into production with this body, and the car was introduced at the Earls Court Motor Show, and named the Le Mans after its race success.

Abroad, the Rootes Export Division will look after sales and servicing of the Sunbeam Harrington which only very recently has been introduced to the United States.

Back as far as the windscreen pillars and the doors, construction is pure Sunbeam Alpine; considerable alterations have been made to the rest of the car. The glass-fibre

fixed-head coupé roof is no temporary hard top, and the rear runs down smoothly to where the tail is cut sharply away. Removal of the tail fins allows the rear wings to blend in smoothly with the line of the roof. Clusters of rear lamps on the cut-off back replace those previously mounted in the fins. A good-sized luggage door with an interior catch includes the large rear window and replaces the small boot lid.

Inside the car, the normal seats have been replaced by well-made and shaped Microcell bucket seats. Behind them

Interior storage space for small items to be kept ready to hand is plentiful; there are a facia locker, a lockable compartment beneath the central arm rest, and small map pockets in each door

PRICES

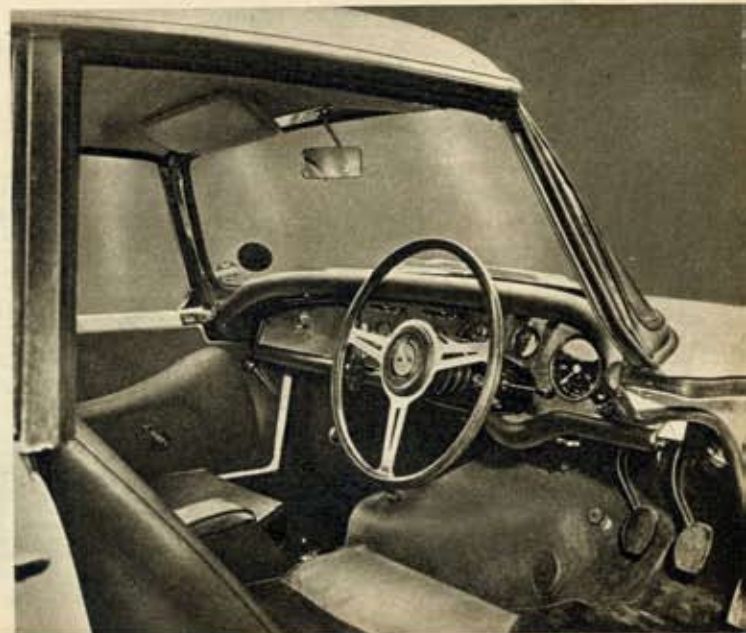
Basic (two-door fixed-head coupé), £1,175

Purchase tax, £319 15s 7d

Total (in G.B.) £1,494 15s 7d

Extras	Basic		Inc. Tax
	£	s d	
Heater	16 10 0
RSS Tyres	...	5 15 0	8 17 8
Overdrive	...	42 10 0	61 19 7
Wire wheels	...	27 0 0	39 7 6

Car complete as tested (total price in G.B.) £1,621 10s 4d



Autocar road test • No. 1860

Make • Sunbeam Harrington Le Mans

Manufacturer: Thomas Harrington Ltd., Sackville Works, Old Shoreham Road, Hove, Sussex

Test Conditions

Weather.....Cold and damp with 10 m.p.h. wind.
 Temperature.....34 deg F. (1 deg. C.).
 Barometer.....29.6in. Hg.
 Damp concrete and tarmac surfaces.

Weight

Kerb weight (with oil, water and half-full fuel tank)
 20.3cwt (2,275lb—1,032kg)
 Front-rear distribution, per cent F. 50.1; R. 49.9
 Laden as tested.....23.3cwt (2,611lb—1,184kg)

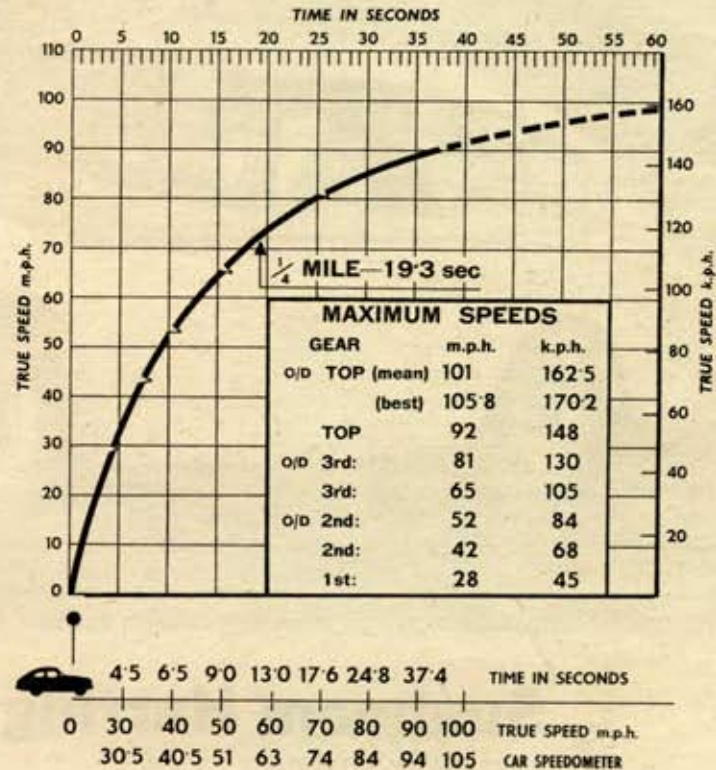
Turning Circles

Between kerbs L. 32ft 11in.; R. 34ft 3in.
 Between walls L. 34ft 3in.; R. 35ft 7in.
 Turns of steering wheel lock to lock3.5

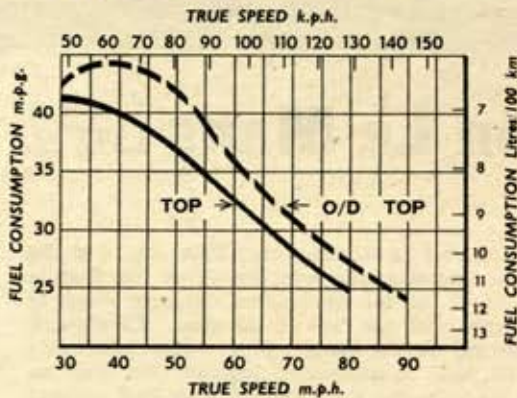
Performance Data

Overdrive top gear m.p.h. per 1,000 r.p.m....19.75
 Top gear m.p.h. per 1,000 r.p.m.....15.9
 Mean piston speed at max. power.....3,000ft/min
 Engine revs. at mean max. speed.....5,100 r.p.m.
 B.h.p. per ton laden82.3

MAXIMUM SPEEDS AND ACCELERATION MEAN TIMES



FUEL AND OIL CONSUMPTION



FUELSuper Premium Grade (100 octane RM)

Test Distance1,002 miles
 Overall Consumption.....20.1 m.p.g. (14.05 litres/100 km)

Normal Range.....20-30 m.p.g. (14.12-9.42 litres/100km)

OIL: S.A.E. 10W30 Consumption 7,500 m.p.g.

Speed range and time in seconds

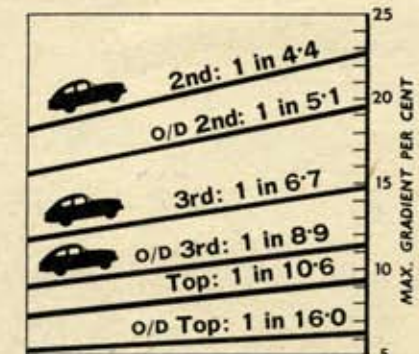
m.p.h.	O.D. Top	Top	O.D. Third	Third	O.D. Second	Second	O.D. First	First
10-30	—	—	—	8.6	6.3	5.0	3.5	—
20-40	—	—	10.9	7.3	5.1	4.0	—	—
30-50	20.6	10.9	9.5	7.0	5.5	—	—	—
40-60	19.6	10.9	9.6	6.9	—	—	—	—
50-70	18.0	11.3	10.0	—	—	—	—	—
60-80	21.0	13.1	12.0	—	—	—	—	—
70-90	28.9	17.2	—	—	—	—	—	—

BRAKES	Pedal load	Retardation	Equiv. distance
(from 30 m.p.h. in neutral)	25lb	0.34g	89ft
	50lb	0.72g	41ft
	75lb	0.93g	32.5ft

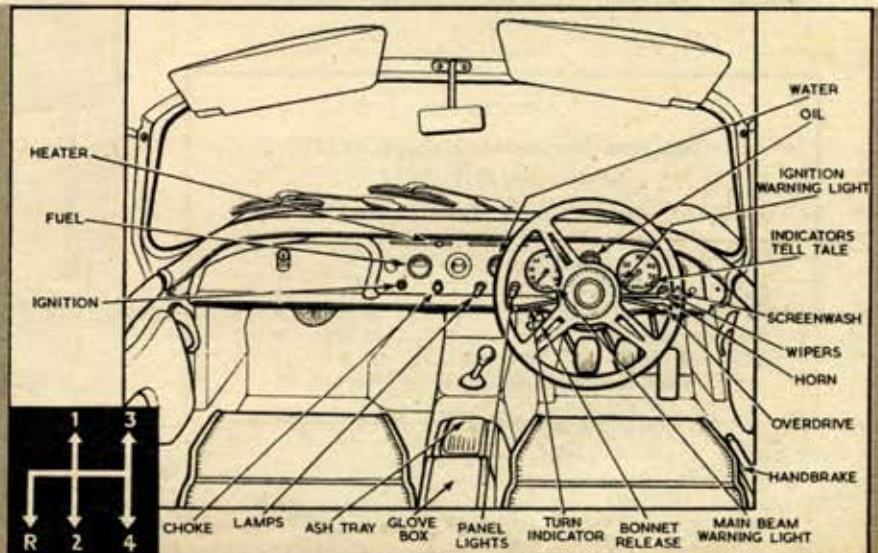
Handbrake 0.40g 75ft

CLUTCH Pedal load and travel—65lb and 4in.

HILL CLIMBING AT STEADY SPEEDS



O.D. Top	Top	O.D. 3rd	3rd	O.D. 2nd	2nd
150	210	250	330	430	500
Speed range (m.p.h.)					
56-58	50-52	45-47	40-42	36-38	30-32



there are two minute optional seats, but more important is the fact that the backrest for these folds forward to provide a greatly extended luggage platform. With this squab down, the total length of the luggage compartment is 46in. It has considerable depth, so that for a two-seater touring car the Le Mans is well supplied with luggage space. Beneath this compartment, and reached by lifting a trap door directly below the rear window, are the spare wheel, jack and other tools. This area was not waterproof, and in wet weather a quantity of water collected here.

These are the body alterations that Harrington have carried out; quality of workmanship is commendable, and the glass-fibre roof is well made and free from movement. In fact, it appears to be an integral part of the original body. One small complaint was that certain road surfaces, notably concrete ones, produced a high-pitched and irritating resonance in the roof. Wind roar was almost entirely absent but the car was never completely free from road noise.

The quality of the car suffers from an original shortcoming; just over a year ago, the Sunbeam Alpine Mark 2 which was road tested by *Autocar* leaked badly through the floor and round the leading edge of the door. This car suffered from exactly the same trouble.

Plenty of headroom is provided, and the driving position is good. A driver approaching six feet in height had insufficient leg and particularly arm room for real comfort, but it would not be difficult to move the seat runners a little farther back. For the passenger, a slightly less upright squab would be more comfortable and relaxing.

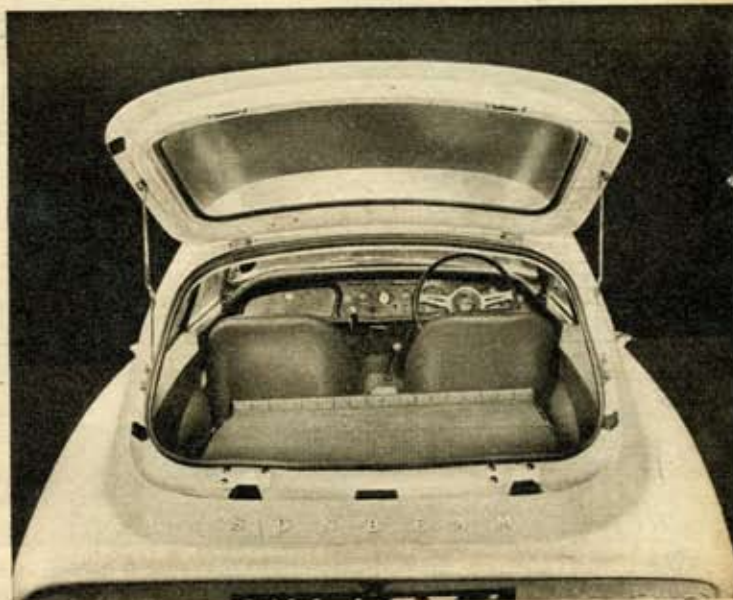
Engine Modifications

The increase in price over the normal Alpine does not merely include these body alterations but also a moderately high degree of tuning to the engine. The small extra weight penalty that this body work entails is more than compensated for by increased power; the engine modifications are carried out by George Hartwell Ltd., of Bournemouth, a firm which has had many years' experience of tuning these power units. Modifications to the engine include a new camshaft, reshaping of the inlet and exhaust ports, and a change of choke and jet sizes in the two down-draught Zenith carburetors. These alterations, it is claimed, raise the power output from 80 b.h.p. at 5,000 r.p.m. to 96 b.h.p. at 6,000 r.p.m. This, however, must be a purely theoretical figure, since the point of valve crash is reached well below this engine speed at 5,800 r.p.m.

One of the impressions given by this power unit, and for that matter by certain minor features of the car, was lack of preparation. When delivered for test the engine would not tick-over, and there seemed to be a distinct lack of crispness. Below about 2,000 r.p.m. there was little pulling power; indeed, there was such a bad flat spot that rapid opening of the throttle resulted in deceleration rather than the reverse. This absence of low-speed pulling power was probably the most unattractive feature of the car and certainly spoilt its potential as a tractable touring conveyance. On the other hand, there was a distinct improvement in performance over the normal Alpine.

Most marked increase in performance was at the top end of the scale; 90 m.p.h. could be reached 13sec quicker than with the standard Alpine, and a standing quarter-mile took nearly 0.5sec less time. Except for two factors, the standing start performance figures could almost certainly be improved. Rear axle tramp initially restricted the engine speed at which getaways could be made, and as the competition clutch warmed up it began to slip. This complaint became sufficiently bad for it to be necessary to ease well back on the throttle when making upward gear changes.

A further modification is the extension of the overdrive to work on all four forward speeds, which gave an option of eight ratios from which to choose. In obtaining the acceleration figures from standstill, overdrive bottom was ignored but in all the other gears the extra ratio was used. When in a hurry on twisty roads this wide range of gears allowed the engine speed to be kept well within the power range. Many owners would probably find this surfeit of gears a nuisance, and willingly exchange it for a wider power range.



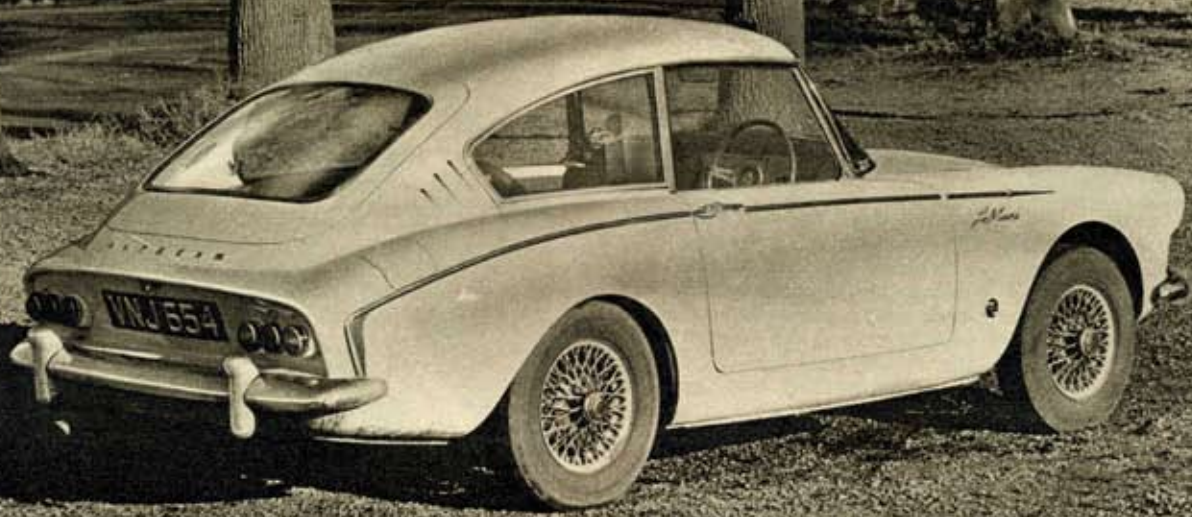
It is an easy task to lift luggage in or out of the wide-opening rear door. The petrol filler cap is hidden beneath the hinged panel on the right wing, which is opened by pressing the upper edge

When cold the engine would start instantly with a little choke that could be dispensed with almost immediately. It took some time to warm up and would repeatedly stall, whereupon it would not restart anything like so readily.

An overall fuel consumption of 20.1 m.p.g. was a shade worse than with the normal Alpine, but this was not surprising for a number of reasons. There was the stalling, the idling speed was fast in order to make the engine tick over at all, and in order to overcome the flat spot at slow speeds it was necessary to jab the throttle and accordingly work the accelerator pump. On the open road, however, it showed itself to have reasonable economy and for most main road runs a consumption around the 25 m.p.g. mark was recorded. For those not in a hurry, a figure better than 30 m.p.g. would not be too optimistic to hope for. Readers may have noticed in the graph show-

An excellently trimmed and upholstered interior greets anyone climbing into the Harrington Le Mans. The front seats tip well forward, but there is little leg room for anyone sitting on the rear seat





Many passers-by stopped to admire the smooth lines of this car. The louvres behind the rear quarter-vents are not dummies, as first appears, but ventilation extractors

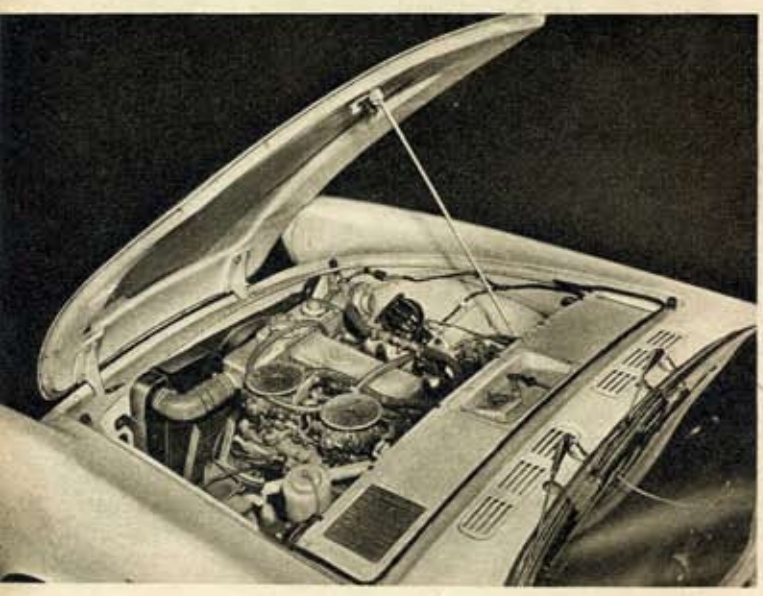
Sunbeam Harrington Le Mans

ing fuel consumption at constant speeds that at 30 m.p.h. in overdrive top the consumption is higher than at 40 m.p.h. in the same gear. Without any doubt the reason for this was the unwillingness of the engine to run at such a slow speed in this gear, when it was near snatch-point the whole time.

With a nine-gallon fuel tank and no reserve, the touring range is rather limited. The small diameter filler cap would accept only a gentle flow from a filling station fuel pump without blowing back.

Assisted by a Clayton-Dewandre servo unit, the brakes on this car were excellent. A pedal load of 75lb resulted in a 0.93g stop, but of even more importance was the fact that a mere 25lb pedal load gave a retardation of 0.34g. Even on rather damp roads, a figure of 0.85g (at 65lb pedal load) without wheel lock was recorded, which says much for the

Beneath the bonnet things are very much as Rootes make them. An addition is the Clayton-Dewandre brake servo unit which permitted very good braking with low pedal loads



balance of this particular model. One feature previously noted on Alpines was apparent also on this car; after a few miles on wet roads the first brake application resulted in little initial retardation and then a tendency to pull to one side or the other as the braking power returned.

No adjustments have been made to the suspension, and the handling of this car would have been greatly enhanced by stiffer rear dampers. As it was, any unevenness in the road made the rear axle hop, and on at least one occasion the car was thrown sufficiently far sideways to cause embarrassment to a lorry being overtaken. Disregarding this waywardness of the rear end, the car has distinct understeer characteristics. During the time it was on test, there were several opportunities to try it on snow and ice. Rear wheel adhesion and traction under these conditions were not ideal with the car unladen, nor was throttle control helped by slight stickiness and the need to be fairly heavy footed to get any response at slow speeds.

On a saloon car the steering would be considered very good, but it is not quite up to the quality of a moderately expensive Grand Touring car. There are 3½ turns from lock to lock, and steering is light at all times although at slow speeds the wheel needs considerable movement.

The optional size tyres, 5.90 x 13 Dunlop RS5s, were fitted to this car, and it was found better to have them inflated rather hard, at 32 p.s.i., since at lower pressures the car's handling became somewhat uncertain and jelly-like in feel. Better handling at the higher pressures is, therefore, won at some sacrifice to the ride, which could not be described as soft. There was also a certain amount of roll, but the secure hold afforded by the bucket seats made this almost indiscernible.

Good Visibility

Visibility has not been impaired by the new roof, for the rear quarter vents run well aft and the rear window is large. The seating position is high and the view forward over the bonnet very complete. Most of the driving controls are well placed, except that the overdrive switch mounted on the steering column is located too close to the steering wheel itself, and could very easily be knocked in or out of action—an accident that could result in mechanical disaster. A horn-operating lever that is actuated by pushing it in any direction was often blown inadvertently when reaching for the windscreen wiper switch. Absence of a headlamp flasher on this type and price of car is becoming less excusable. Replacement of the normal flat, sharp-edged knob on the gear selector by a smooth pear-drop shaped wooden one has vastly improved the feel of this control. There is a wood-rimmed, alloy-spoked steering

wheel, and the sun vizors are of the soft safety-type. A lockable lid is provided for the facia glove pocket.

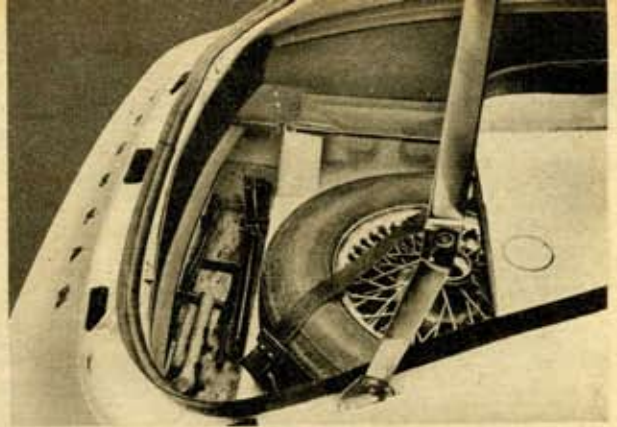
Instrumentation is to normal Alpine specification, and very adequate. Many of the instruments are graduated in both British and Continental scales.

During the bitter weather that heralded 1962 it was possible to draw very definite opinions about the heating system. The interior of the car became pleasantly warm, but the built-in extractors at the rear were not sufficient and to prevent the interior becoming stuffy one of the rear quarter-vents needed to be open. The windscreen could be kept demisted but the defroster could not start to cope with the conditions that are only too common in many parts of North America. The rear window also tended to mist up.

This car was fitted with earless safety-type knock-off hubs, and a puncture that occurred during the test revealed that only a few wheel changes with the spanner provided would result in a badly mauled edge to the chromed nut. Secondly, the jack and jack handle, which appeared not to have been used previously, could not be persuaded to fit each other.

Down the inside of the doors is a thickly padded wedge which is designed to act as both an armrest and knee pad; in practice few who drove the car found it an advantage and it hindered easy operation of the window winders and door handles.

In conception the idea of the Harrington Le Mans



Spare wheel, jack and tools live in the same space as on a normal Sunbeam Alpine. Removal or stowage of the spare wheel is not as difficult as it might appear at first sight

appears to be absolutely right, and certain continental makes have shown that there is a large market for high quality, fast, two- and occasional four-seater cars. Where it has lived up to its ideals the car is very pleasant, but it is a compromise between different designs and standards. Regardless of this, there is no doubt that its specification and quality will suit many tastes. This particular car tested showed signs of having had a hard life, and in good fettle some of the minor criticisms probably would not apply.

Specification

ENGINE

Cylinders ...	4 in line
Bore ...	81.5mm (3.21in.)
Stroke ...	76.2mm (3.0in.)
Displacement ...	1,592 c.c. (97.1 cu. in.)
Valve gear ...	Overhead, pushrods and rockers
Compression ratio ...	9.0 to 1
Carburettor ...	Two Zenith 36 WIP3
Fuel pump ...	AC mechanical
Oil filter ...	External, renewable element
Max. power ...	96 b.h.p. (net) at 6,000 r.p.m.
Max. torque ...	105 lb. ft. at 4,500 r.p.m.

TRANSMISSION

Clutch ...	Borg and Beck, 8in., with competition plate and springs
Gearbox ...	Four speed, synchromesh on 2nd, 3rd and top. Overdrive on all forward speeds (Laycock-de Normanville)
Overall ratios ...	O.D. top 3.39, top 4.22, O.D. 3rd 4.72, 3rd 5.88, O.D. 2nd 7.24, 2nd 9.04, O.D. 1st 11.31, 1st 14.12, reverse 17.9
Final drive ...	Hypoid bevel, 4.22 to 1

CHASSIS

Construction ...	Integral, steel hull with glass-fibre roof
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SUSPENSION

Front ...	Independent, coil springs and wishbones, anti-roll bar, Armstrong AT7 telescopic dampers
Rear ...	Rigid axle on half-elliptic leaf springs, Armstrong DAS9 lever arm dampers
Steering ...	Burman recirculating ball. Wheel dia, 15in.

BRAKES

Type ...	Girling hydraulic, discs front and drums rear, Clayton Dewandre servo unit
Dimensions ...	F. 9.5in. dia. discs R. 9.0in. dia. drums, 1.75in. wide shoes
Swept area ...	F. 196 sq. in.; R. 99 sq. in. Total 295 sq. in. (253 sq. in. per ton laden)

WHEELS

Type ...	Wire-spoked centre lock, 4.00in. wide rim
Tyres ...	5.90-13 Dunlop R.S.5

EQUIPMENT

Battery ...	12 volt 43-amp. hr.
Headlamps ...	Lucas, 50-40 watt
Reversing lamp ...	None
Electric fuses ...	2
Screen wipers ...	2, single-speed, self-parking
Screen washer ...	Extra, manual plunger
Interior heater ...	Extra, fresh air from scuttle vent
Safety belts ...	Anchorage provided
Interior trim ...	Woven fabric and leather cloth, plastic roof lining
Floor covering ...	Carpet
Starting handle ...	Standard
Jack ...	Screw pillar
Jacking points ...	At each corner
Other bodies ...	None

MAINTENANCE

Fuel tank ...	9 imp. gallons (no reserve)
Cooling system ...	15 pints (inc. heater)
Engine sump ...	8 pints. Change oil every 2,000 miles. Change filter element every 6,000 miles
Gearbox and overdrive ...	4 pints SAE 30. Change oil every 6,000 miles
Final drive ...	1.75 pints SAE 90 EP. Change oil every 6,000 miles
Grease ...	16 points every 1,000 miles
Tyre pressures ...	F. and R. 28 p.s.i. (normal driving) F. and R. 32 p.s.i. (fast driving)

Scale: 0.3in to 1ft.
Cushions uncompressed

