



## Sunbeam ALPINE (Series III) Sports Tourer

It is not in any sense of disparagement that the Sunbeam Alpine is put in the touring rather than the sports category. It has the carrying capacity (for two), the comfort, ride, and handling of an open tourer along with good performance and reasonable fuel economy. Winding glass windows and a substantial hood make it extremely weather proof, but raising and lowering the top is a long job for the inexperienced. Its competition successes at Le Mans were appropriate; this is a comfortable, reliable long-distance car for the open road tourist rather than the enthusiastic sprinter.

One of the improvements made to the Alpine II was the enlargement of the engine to 1,592 c.c. and the latest car has a Solex compound carburetter giving it 80½ b.h.p. at 5,000 r.p.m. The performance is quick without being extremely fast (maximum speed is 97 m.p.h.) and poor low-speed torque makes it easier to drive the car quickly on good roads with open curves rather than twisty ones where the engine revs drop. This characteristic is aided by the new close-ratio gearbox which has a very good change and (on the test car) overdrive on third and top. One of the most significant improvements are new seats which, in conjunction with an adjustable steering column, and adjustable pedals, give an almost infinite variety of driving positions, easing the accommodation of drivers of varying height and proportions. Filling both the rear fins with fuel tanks has resulted in vastly increased luggage accommodation and, in several other ways, user convenience has been studied to good effect.

The rather heavy steering which seems to afflict some Rootes models does not make its presence felt so much on the Alpine III. It feels stiff rather than heavy and the woolly characteristic remains, making it one of the car's less satisfactory features. Otherwise, the handling is good, extremely safe, and predictable except over a very bumpy surface, and the brakes are good. The ride is outstanding and combines with the unusually comfortable seats to make this a pleasant car for the passenger as well as the driver. With such a high level of luxury and so much thought given to detail refinements, what this latest Alpine loses on the sporting roundabouts, it gains on the touring swings.

### Performance and economy

STARTING from cold is sometimes an unhappy business. The choke had to be used after standing outside on even quite a mild night. Opening the throttle with the choke out meant that the engine refused to fire and once going, running was uneven for about two miles in traffic even with the control returned half way. Once warmed up, the engine becomes quiet and smooth, making a not unpleasant throb when the throttle is opened. Power below about 2,000 r.p.m., however, is meagre so that lots of ordinary traffic can beat the car away from traffic lights unless the clutch is let in at about 3,500 r.p.m. which makes a ragged, lurching getaway. One must be content with taking off smoothly and allowing the revs to build up in first gear to avoid the low-speed flat spot. Idling was fast (about 1,000 r.p.m.) and the engine stalled easily under heavy braking. Using the revs up to the red line on the tachometer at 5,000 the engine is fussless and mechanically quiet and the exhaust noise subdued. Test hill restarts were unsuccessful on a 1 in 3 gradient, where even high revs failed to get the car going and the most brutal methods only just achieved a restart on 1 in 4.

The top speed of the Alpine was achieved using direct top; the

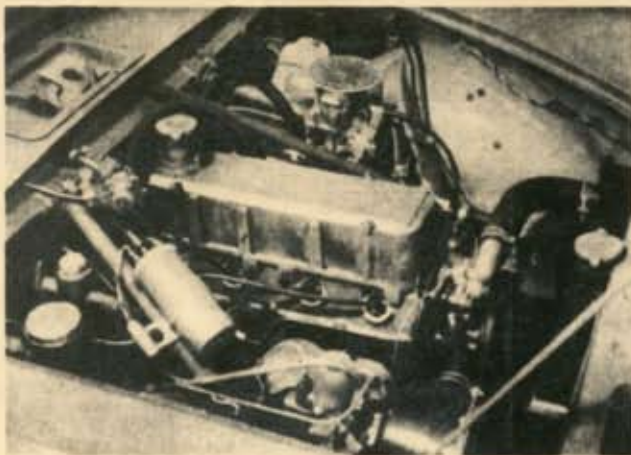
### In Brief

Price (including overdrive as tested) £737 10s. 0d. plus purchase tax £154 4s. 2d. equals £891 14s. 2d.	
Capacity .. .. .	1,592 c.c.
Unladen kerb weight .. .. .	20 cwt.
Acceleration:	
20-40 m.p.h. in top gear .. .. .	13.2 sec.
0-50 m.p.h. through gears .. .. .	10.0 sec.
Maximum top gear gradient .. .. .	1 in 11.6
Maximum speed .. .. .	97.0 m.p.h.
Overall fuel consumption .. .. .	21.2 m.p.g.
Touring fuel consumption .. .. .	35.3 m.p.g.
Gearing: 17.2 m.p.h. in top gear at 1,000 r.p.m. (overdrive 21.4 m.p.h.).	

## Sunbeam ALPINE



The fascia layout (above) is neat, practical, and well lit at night. Blanks are left for additional instruments or accessories; the clock is an optional extra. Early Alpines had windows in the rear quarters of the hood (top left); their subsequent deletion leaves blind spots in the view aft. When furled, the hood is flush with the body top under a neat, metal cover. (Below) The new reclining seats (the headrest on the passenger's is optional) are an important feature of the Alpine III. The armrest lid unlocks giving access to a useful compartment.



(Above) The single Solex compound carburetter has a small, flat air cleaner. Released from inside the car, the bonnet hinges at the front.

overdrive maximum was about 2½ m.p.h. slower with the hood up. Naturally, motoring with the hood down affected maximum speed to the extent of about 8 m.p.h. in still air. Fuel consumption was reasonable at 21.2 m.p.g. (worse by 3.8 m.p.g. than the Alpine II tested in December, 1960), but the Touring figure showed an improvement, by no less than 5.2 m.p.g., indicating the value of the new carburetter and the higher overall gearing.

### Transmission

THE neat, central gearchange works extremely well and even if the movement is still a little stiff, Rootes seem to have learned how to make a good sports car change, and the clutch is light. Synchromesh on first would be more than usually desirable on account of the low-speed flat spot (a downchange from second is often needed in traffic), but the synchromesh on the three upper gears is good and almost unbeatable. Third to top in particular is accomplished very swiftly. First gear whines, but otherwise the gearbox is quiet and the new close ratios provide one with a gear for nearly every occasion.

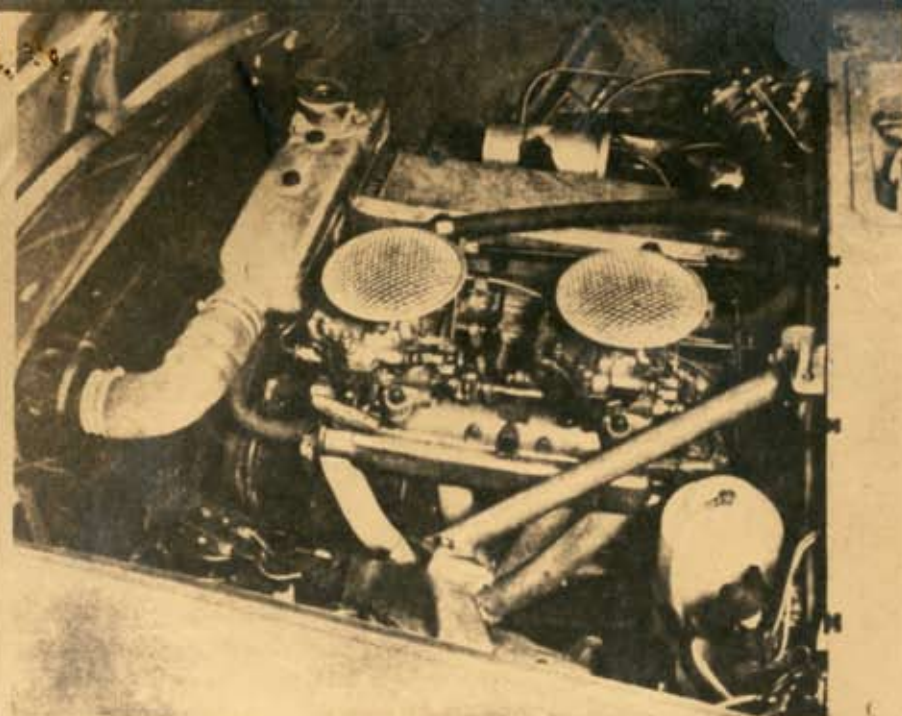
The overdrive works on third and top, but its value in third is limited. In fact, it is little more than an easily engaged gear with a ratio very close to direct top. It could not be considered as effectively converting the transmission to six speeds and the excellence of the gear change further diminishes its value on third. The overdrive switch is a stalk on the right of the steering column with the new return action which cancels itself automatically. This means that changes can be made out of overdrive without recourse to the stalk, movement of the gear lever across the gate cancelling the overdrive. To avoid a jerk, upward and downward overdrive changes are best made with the throttle open.



### Handling and brakes

THE Alpine steering is better than before, but it remains stiff and indefinite. The gearing is about right for the character of the car at 3½ turns from lock to lock, but the driver is left without much feeling of the road or the position of the front wheels. The oversteer of earlier models has been curbed by the use of a larger front anti-roll bar and the car is now very manageable on corners. Break-away of the Dunlop Road Speed tyres can be postponed until the speed on bends is very high indeed, and when it does come, it is very gradual and controllable. The high safety factor is maintained in the wet but if the steering were more precise the car could be handled with a great deal more confidence; the point where opposite lock correction must be applied would be more easily gauged.

Cornering produces no tyre howl and only a little roll. Bumps affect stability to the extent of making the car step "out of line" quite a lot, particularly at the front if the bumps are sharp. The back behaves in a more satisfactory manner and axle hop seems less than



the day, with only a midday break for lunch, and both driver and passenger were remarkably fresh at the end. This is a considerable tribute to the comfort of the upholstery and to the lateral support given by well-shaped seats. Comfort is enhanced by an excellent fresh air heater, boosted by a noisy but unusually powerful fan which gives quite good ventilation in warmish weather, even with the windows shut. It is difficult to adjust for the slight warmth needed in mild autumn weather, since the heat control lever has a rather marked on/off action near the "minimum" end of the scale, but it is capable of keeping the car warm and the screens mist-free at the top of a mountain pass in heavy snow.

A steering column which projects a long distance from the fascia compels the driver to sit close to the steering wheel unless he is very tall, as most sports car drivers now favour the long-arm position, it is unfortunate that a telescopic adjustment is not offered or even, perhaps, a choice between

long and short columns. Both the clutch, which has a short but rather heavy travel, and the brakes are operated by pedals with a two-position adjustment which can be effected reasonably quickly by movement of a clevis pin, but heel and toe operation of the brake and accelerator pedals is very difficult. Very light pressures and a minimum of free travel make the brakes exceptionally pleasant to use: a pedal force of 25 lb. gives a deceleration of 0.4 g, as much as most drivers will use in a day's hard driving, but for maximum braking, enough effort is needed to avoid the risk of inadvertent wheel locking. The Alpine now has "backplates" to protect its front discs from water spray, but in heavy rain there is an initial hesitancy and slight tendency to pull to one side, which suggests that the friction pads still have to bite through a film of water before resuming their usual command of the situation.

Rather similar fingertip levers projecting from left- and right-hand sides of the

The 36 mm. downdraught Zenith carburettors are protected by coarse strainers but have no air silencing and the cross-flow radiator has a separate small header tank. The tube running diagonally across the foreground is a bracing strut between the wheel arches and the scuttle.

steering column operate the flashers and the Laycock overdrive respectively. This arrangement can be rather confusing to a stranger, and a more unmistakable overdrive switch with the two positions clearly identified would be an improvement. Changes into and out of overdrive top were a little on the fierce side and later on this unit lost the ability to transmit full torque in overdrive third without slip. When this had been rectified, trouble developed with the top gear synchromesh after subjecting it to the stresses of the high-speed timed acceleration tests, but a modification has now been put into production to eliminate this weakness in an otherwise excellent gearbox with well-chosen if not altogether silent ratios and very powerful synchromesh. The rather heavy gearchange might be improved by a longer gearlever travel.

Even with the hardtop in place, a third person can occupy the occasional rear seat, but in some discomfort. Although useful for emergency short-distance transport, the real function of the rear compartment is to provide room for a great deal of luggage, far more than will fit into the very small boot. In this, and other respects, the Alpine falls without equal at the price into the proper Grand Touring tradition of a car which will effortlessly carry two people and ample luggage for long distances at high speed with a very high level of comfort and pleasure. Less traditional, perhaps, is the fact that for 1,750 miles of such motoring on the Continent, the fuel consumption was better than 27 m.p.g.

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## Specification

Engine	
Cylinders	4
Bore	81.5 mm.
Stroke	76.2 mm.
Cubic capacity	1,592 c.c.
Piston area	72.3 sq. in.
Valves	Overhead (push-rod)
Compression ratio	9.1:1
Carburettors	2 Zenith 16 WJF 2
Fuel pump	AC mechanical
Ignition timing control	Centrifugal and vacuum
Oil filter	Tecumseh full flow
Max. power (gross)	85.5 b.h.p. (80 net)
at	5,000 r.p.m.
Piston speed at max. b.h.p.	2,500 ft./min.
Transmission	
Clutch	8 in. Borg & Beck (d.p.)
Top gear (i/m)	4.22 (overdrive, 3.39)
2nd gear (i/m)	5.88 (overdrive, 4.72)
1st gear (i/m)	9.04
Reverse	12.13
Overdrive	Laycock de Normanville
Propeller shaft	Hardy Spicer open
Final drive	Hypoid bevel
Top gear m.p.h. at 1,000 r.p.m.	16.2 (overdrive, 20.2)
Top gear m.p.h. at 1,000 ft./min. piston speed	32.4 (overdrive, 40.4)
Chassis	
Brakes	Girling hydraulic disc front, drum rear
Brake disc diameter	9 1/2 in.
Brake drum inside diameter	9 in.
Total friction lining area	80.6 sq. in. of lining working on 295 sq. in. rubbed area of discs and drums
Suspension	
Front	Independent by coil springs, transverse wishbones and anti-roll bar
Rear	4-elliptic leaf springs and live axle.
Shock absorbers:	
Front	Armstrong telescopic
Rear	Armstrong lever arm
Steering gear	Burman recirculating ball
Tyres	Dunlop R.S.4 5.90-13 on test car (standard fitting Dunlop 5.60-13).

## Coachwork and Equipment

Starting handle	Yes	Warning lights	Ignition, headlamp main beam, direction indicators.	
Battery mounting	Under occasional rear seat	Locks	With ignition key	Either door
Locks	Some pillar type	With other key		Glove locker and luggage boot
Talking points	At the 4 corners of bumper brackets	Glove lockers	Open cubbyhole in fascia and lockable compartment between the seats.	
Standard tool kit	Box spanner, tommy bar, adjustable spanner, 4 open-ended spanners, pliers, screwdriver, distributor key, tyre valve key, plug gauge, starting handle, jack and nose plate extractor	Map pockets	None	
Exterior lights	2 headlamps, 2 sidelamps, flashers, 2 stop/tail lamps, rear number plate lamp	Parcel shelves	None	
Number of electrical fuses	Two	Ashtays	One in front compartment	
Direction indicators	Self-canceling flashers	Cigar lighters	None	
Windscreen wipers	Electrical twin-blade, self-parking	Interior lights	Map light in cubby hole	
Windscreen washers	Optional extra	Interior heater	Optional extra fresh-air type	
Sunvisors	None	Car radio	Optional extra Radiomobile or Ekco	
Instruments	Speedometer, rev. counter, oil-pressure gauge, fuel gauge, water-temperature gauge	Extras available	Hardtop, overdrive, centre-lock wire wheels, Road Speed or whitewall tyres, heater, radio, tonneau cover, sun visors, etc.	
		Upholstery material	Vinyl	
		Floor covering	Rubber mats	
		Exterior colours standardized	5	
		Alternative body styles	None	

## Maintenance

Sump	8 pints, S.A.E. 20/20W or 10W/80	Tappet clearances (hot)	
Gearbox	2 1/2 pints, S.A.E. 30	Inlet	0.12 in.
Rear axle	1 1/2 pints, S.A.E. 90 E.P.	Exhaust	0.14 in.
Steering gear lubricant	S.A.E. 140 E.P.	Front wheel tie-rod	1/8 - 1/4 in.
Cooling system capacity	14 pints (2 drain taps)	Camber angle	-1 to -1 1/2
Chassis lubrication	By oil gun every 1,000 miles to 15 points.	Castor angle	+1
Ignition timing	57° P.T.D.C.	Steering (swivel) pin inclination	0 to 1/2°
Contact-breaker gap	0.14-0.16 in.	Tyre pressures:	
Spark plug type	Champion N43	Front	24 lb.
Spark plug gap	0.25 in.	Rear	23 lb.
Valve timing: Inlet opens	14° B.T.D.C. and closes 10° A.T.D.C.	(For fast driving, as fit level and 27 lb. rear.)	
		Exhaust	24 lb.
		Exhaust	23 lb.
		Exhaust	(For fast driving, as fit level and 27 lb. rear.)
		Brake fluid	S.A.E. 10W/30
		Battery type and capacity	150 amp. 67/74
			38 amp. hr. 32.

# THE Motor

## TEST DATA:

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**CONDITIONS:** Weather Dry, mild, with no wind (Temperature 55°-60°F., Barometer —29.6 in Hg.). Surface: Dry concrete and tarmac/adam. Fuel: Premium grade pump petrol (98 Octane by Research Method).

### MAXIMUM SPEEDS

**Flying Mile**  
 Mean of two opposite runs ... 97.0 m.p.h.  
 Best one-way 1-mile time equals ... 97.2 m.p.h.

**"Maximile" Speed:** (Timed quarter mile after one mile accelerating from rest).  
 Mean of four opposite runs ... 90.0 m.p.h.  
 Best one-way time equals ... 90.0 m.p.h.

**Speed in gears**  
 Max. speed in 1st ... 35.0 m.p.h.  
 Max. speed in 2nd ... 51.4 m.p.h.  
 Max. speed in 3rd ... 82.2 m.p.h.  
 Max. speed in 4th top ... 91.5 m.p.h.

### ACCELERATION TIMES

**From standstill**  
 0-30 m.p.h. ... 4.6 sec.  
 0-40 m.p.h. ... 7.4 sec.  
 0-50 m.p.h. ... 10.0 sec.  
 0-60 m.p.h. ... 14.4 sec.  
 0-70 m.p.h. ... 20.4 sec.  
 0-80 m.p.h. ... 28.2 sec.  
 0-90 m.p.h. ... 43.3 sec.  
 Standing quarter mile ... 19.9 sec.

### On upper ratios

	Third gear	Top gear	Overdrive Top
10-30 m.p.h.	10.7 sec.	14.6 sec.	—
20-40 m.p.h.	9.1 sec.	13.2 sec.	19.4 sec.
30-50 m.p.h.	8.3 sec.	11.9 sec.	19.8 sec.
40-60 m.p.h.	9.7 sec.	12.7 sec.	19.9 sec.
50-70 m.p.h.	11.2 sec.	14.8 sec.	21.6 sec.
60-80 m.p.h.	13.6 sec.	16.4 sec.	27.5 sec.
70-90 m.p.h.	—	23.2 sec.	53.7 sec.

### HILL CLIMBING

Max. gradient climbable at steady speed  
 Overdrive top gear 1 in 18.5 (Tapley 120 lb./ton)  
 Top gear 1 in 11.6 (Tapley 190 lb./ton)  
 Third gear 1 in 8.4 (Tapley 265 lb./ton)  
 Second gear 1 in 5.3 (Tapley 420 lb./ton)

### FUEL CONSUMPTION

Overall Fuel Consumption for 1,508 miles, 71.1 gallons, equals 21.2 m.p.g. (13.4 litres/100 km.)  
**Touring Fuel Consumption** (m.p.g. at steady speed midway between 30 m.p.h. and maximum, less 5% allowance for acceleration) 35.3 m.p.g.  
 Fuel tank capacity (maker's figure) 11½ gallons

### Overdrive top gear

50½ m.p.g.	at constant 30 m.p.h. on level
50 m.p.g.	at constant 40 m.p.h. on level
45½ m.p.g.	at constant 50 m.p.h. on level
39½ m.p.g.	at constant 60 m.p.h. on level
33½ m.p.g.	at constant 70 m.p.h. on level
27 m.p.g.	at constant 80 m.p.h. on level
22 m.p.g.	at constant 90 m.p.h. on level

### Direct top gear

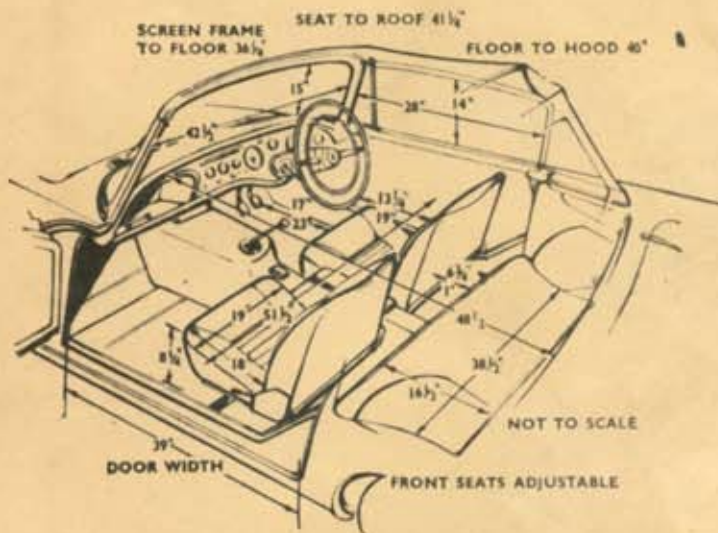
47½ m.p.g.	at constant 30 m.p.h. on level
44½ m.p.g.	at constant 40 m.p.h. on level
40½ m.p.g.	at constant 50 m.p.h. on level
35½ m.p.g.	at constant 60 m.p.h. on level
30 m.p.g.	at constant 70 m.p.h. on level
24½ m.p.g.	at constant 80 m.p.h. on level
19 m.p.g.	at constant 90 m.p.h. on level

MAKE: Sunbeam

TYPE: Alpine III Sports Tourer

MAKERS: Sunbeam, Ltd., Ryton-on-Dunsmore, Nr. Coventry.

## ROAD TEST ● No. 37/63



### BRAKES

#### Deceleration and equivalent stopping distance from 30 m.p.h.

0-28 g with 25 lb. pedal pressure	107 ft.
0-56 g with 50 lb. pedal pressure	53 ft.
0-88 g with 75 lb. pedal pressure	34 ft.
0-98 g with 95 lb. pedal pressure	31 ft.

### STEERING

Turning circle between kerbs	34 feet
Left	33 feet
Right	33 feet
Turns of steering wheel from lock to lock	3½

### INSTRUMENTS

Speedometer at 30 m.p.h.	3% fast
Speedometer at 60 m.p.h.	3% fast
Speedometer at 90 m.p.h.	2% fast
Distance recorder	1% slow

### WEIGHT

Kerb weight (unladen but with oil, coolant and fuel for approximately 50 miles)	20 cwt.
Front/rear distribution of kerb weight	51/49
Weight laden as tested	23½ cwt.

## Specification

Engine	
Cylinders	4
Bore	81.5 mm.
Stroke	76.2 mm.
Cubic capacity	1,592 c.c.
Piston area	32.3 sq. in.
Valves	o.h.v. (pushrod)
Compression ratio	9.1/1
Carburettor	Solex 32 PAIA compound twin choke
Fuel pump	AC mechanical
Ignition timing control	Centrifugal and vacuum
Oil filter	Full flow
Maximum power (net)	80.5 b.h.p. at 5,000 r.p.m.
Maximum torque (net)	93.4 lb. ft. at 3,500 r.p.m.
Piston speed at maximum b.h.p.	2,480 ft./min.

### Transmission

Clutch	Borg & Beck 8 in. dia. diaphragm
Top gear (s/m)	3.889 (Overdrive, 3.123)
3rd gear (s/m)	4.80 (Overdrive, 3.854)
2nd gear (s/m)	7.381
1st gear	11.538
Reverse	14.615
Overdrive	Laycock-de Normansville
Propeller shaft	B.R.D. gearless open
Final drive	Hypoid
Top gear n.p.h. at 1,000 r.p.m.	17.2 (Overdrive, 21.4)
Top gear m.p.h. at 1,000 ft. min. piston speed	34.2 (Overdrive, 42.8)

### Chassis

Brakes	Girling servo assisted, disc front, drum rear
Brake dimensions:	9.85 in. dia. discs 9 in. diameter drums
Friction areas:	295 sq. in. lining area
Suspension:	Front: Independent, by coil springs and anti-roll bar Rear: Semi-elliptic springs with live rear axle
Shock absorbers	Armstrong telescopic
Steering gear	Burman recirculating ball
Tyres	Dunlop 6-00-13 tubeless



Now that the fuel tanks have been put inside the fins and the spare wheel mounted vertically, luggage space is really useful.

with some other live axle designs. Side winds can throw the car slightly off a straight course at speed.

Fade is not a vice of the disc and drum braking system, but the combination of an easily stalled engine and a vacuum servo which loses all its assistance immediately the engine stops can be unpleasant. Normally, the brakes were light and gave very good stopping power, but the vacuum had no reserve for even one stop after the engine died, and pedal pressures rose simultaneously.

## Comfort and control

THE touring aspect of the Alpine III is emphasized by its exemplary ride on open roads. The suspension absorbs long and short-wave undulations equally well with only a slow, vertical movement which is well damped and free from subsequent pitching. At lower speeds, on poor suburban surfaces, the ride is firm by modern standards. One of the most significant features of the car are seats which not only can be adjusted to an unusual variety of positions but are extremely comfortable and form-fitting. Many hours can be spent in them without fatigue and they locate the occupants well during cornering or over roads so rough that even the good ride causes some jolts. The combination of quite firm suspension and "low-bounce" seats produces a feeling of solidity and comfort.

The driving position is in sports car pattern, fairly near the floor with the driver's legs stretched out ahead of him. The nearly-vertical steering wheel is farther forward and higher than in previous models, giving plenty of clearance below it. Some people thought of this as a mixed blessing because it puts the driver's arms horizontal at nearly shoulder height if the hands are on the wheel at "ten-to-two."

Wind noise with the top up was not unexpectedly loud but back-draught when the car was open proved pleasantly little. Driving thus

with the heater on and the side windows up is natural on quite cool autumn days and evenings; visibility is good and there is little of the usual buffeting one gets in many open cars. With the top up, opening the window produces a lot of wind roar but little draught, and weatherproofing is completely satisfactory even in heavy rain and high winds. Erection and folding of the top is complicated and the first attempt to take it down occupied fully five minutes. With experience this time is reduced considerably but it remains rather a laborious operation, albeit a small price to pay for such a substantial and unflappable hood.

The heating and demisting system is effective and quiet and even though non-swivelling quarter lights have been placed at the wind screen pillars to locate the leading edges of the wind-up windows, visibility is much better than in most saloons. The attempt to make the side-windows more rigid has only been partly effective because they rattle a little when the car is open. The rear view mirror vibrates slightly, but gives a good view and the tail fins are especially useful for judging length when manoeuvring in confined spaces.

## Fittings and furniture

IT is perhaps in detail items that the Sunbeam scores most heavily. The fascia is well laid out and all the switchgear is placed conveniently. The instruments are easily read once one becomes used to looking past the horn ring, and their calibrations (in British and Metric units) are satisfactory. The fuel gauge is particularly good and is marked off accurately in gallons (and litres) so that one can order a specific amount to fill up, knowing that there will be no spillage. Most of the instruments gave steady readings but the tachometer fluctuated.

Thinly upholstered, the space behind the seats cannot be treated seriously for taking a third person in the car with the top up, except in an emergency. It might accommodate a small child but it is best thought of as a large parcel shelf except that the exhaust pipe passes close under it and heats the floor. The upholstery is practical and tough-looking and the floor is rubber covered except over the substantial gearbox hump which has a pile carpet. Black crackle finish is used for the fascia which is good for a car likely to be open a great deal and there is a padded safety roll along the top.

Attention has been paid to practical aspects like the carriage of small items and luggage. The armrest has a lid which locks with the same key as the boot so that things can be locked away without making the car undrivable and there is a supplementary open glove box in the fascia. The new, large boot contains the spare wheel and the very comprehensive tool kit, but there is lots of space left for baggage. The jack is clipped neatly to the forward bulkhead in the boot.

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## Coachwork and Equipment

Starting handle	Yes	Windscreen wipers: Electrical self-parking, two speed	None
Battery mounting	Behind seats	Windscreen washers	Manual
Jack	Pillar screw type	Sun visors	None
Jacking points	4 corner sockets	Instruments: Speedometer with total and decimal trip mileage recorders, tachometer, oil pressure, fuel, and water temperature gauges.	Map light in fascia
Standard tool kit: Tommy bar and plug spanner, adjustable spanner, 4 open ended spanners, pliers, screwdriver, distributor key, tyre valve key, valve and spark plug gauge, jack, wheelbrace, nave plate remover, starting handle.		Warning lights: Ignition, main beam, direction indicators, overdrive where applicable.	Fresh air type, optional
Exterior lights: 2 head, 2 side, flashers front/rear, 2 stop/tail, 1 number plate light.		Locks: With ignition key: Ignition/starter and both doors	Optional
Number of electrical fuses	2	With other keys: Luggage boot and glove locker	Upholstery material
Direction indicators	Self-cancelling flashers	Glove lockers	Centre armrest
			Alternative body styles
			G.T. hard-top

## Maintenance

Sump	8 pints, S.A.E. 30 (or 20W/40)	Spark plug type	K. I. G. FE75	Castor angle	4° 41'
Gearbox	2½ pints, S.A.E. 30	Spark plug gap	0.25 in.	Steering swivel pin inclination	5° 15' ± 15'
Rear axle	1½ pints, S.A.E. 90 EP	Valve timing: inlet opens 14° b.t.d.c. and closes 52° a.b.d.c. Exhaust: opens 56° b.b.d.c. and closes 10° a.t.d.c.		Tyre pressures:	
Steering gear lubricant	90 EP	Tapet clearances (bc): Inlet .012 in. Exhaust .014 in.		Front	24 lb.
Cooling system capacity	12½ pints (2 drain taps)	Front wheel toe-in	1.25 in.	Rear: 24 lb. (for high speeds, raise rear pressures by 2 lb.)	
Chassis lubrication: By grease gun every 3,000 miles to 13 points.		Camber angle	0° 30' ± 15'	Brake fluid	Girling SAE 70 R3
Ignition timing	9°-11° b.t.d.c.			Battery type and capacity: Lucas GTW 7A 12 volt 38 amp-hr.	
Contact breaker gap	0.15 in.				