

THE AUTOMOBILE ASSOCIATION

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## Sunbeam Alpine GT

June 1966

R/128



### Brief Data

Price: £938 1s 3d  
Capacity: 1,725 cc  
Maximum power (net): 92½bhp at 5,500rpm  
Kerb weight: 19¾cwt  
Maximum speed: 101mph  
0-60mph: 13.2 seconds  
Brake pedal load for 0.75g deceleration: 70lb  
Fuel consumption over 536 miles: 30mpg  
Over-all length: 13ft 0 in  
Over-all width: 5ft 0½in

### Introduction

Sunbeam Alpines come in two forms - the Sports Tourer and the GT. Our test covers the latter model which has a hardtop as part of its standard equipment and is also distinguished from the cheaper model by its more luxurious interior trimming and a heater. Power is provided by a four cylinder, 1,725cc engine with a four speed, all-synchromesh gearbox. The suspension is independent at the front with a live axle at the rear, and braking is by front discs and rear drums. Exterior brightwork parts are chromium plate and stainless

steel, and there is a choice of six body colours. Extras on our car were an overdrive (£54), white-wall RS5 tyres (£10), fog and spot lights, a radio, and seat belts.

### Performance

In Alpine form (twin carburettors, twin exhaust, and a high-lift camshaft), the new Rootes engine develops 15½bhp more than the earlier 1,592cc unit. It starts instantly from cold, takes only a short time to warm up, and then settles to an even idling speed. Five crankshaft bearings provide very smooth running right up to the red band limit at 5,500rpm, while at the other end of the scale, the car will pull away from about 16mph in top gear without any fuss. Acceleration, although not of the head jerking type, is smooth and progressive in each gear without the engine sounding hard at work. The engine is generally subdued and the car can cruise comfortably at about 90mph in overdrive top.

The light, firmly biting clutch gets the car away smartly and stands up to hard use without any signs of spinning. In spite of a somewhat rubbery feel to the lever, gear changing is very quick and precise. Synchromesh is fitted to the four close ratios and is unbeatable however fast the gears are selected. The two overdrive ratios (on third and top gears) are automatically cut out when changes are made into a lower gear, and can be conveniently re-engaged by a flick on the steering column mounted stalk. Although we found little need for overdrive in third gear, it is very useful in top for reducing engine speed and conserving fuel.

### Handling and brakes

Firm, well damped suspension gives the Alpine a comfortable ride with little roll when cornering. Handling is always predictable and the rear wheel hop sometimes felt on really bumpy corners is not excessive. Steering is precise and quite light though it becomes rather heavier than one would expect as more lock is applied. It is only on poor surfaces that tremors are felt through the wheel. Normally the Alpine is a mild understeerer, but final oversteer sets in as the limiting speed of a corner is reached. Gusty side winds have little effect on the good straight line running.

Front disc and rear drum brakes provide consistently good stopping power, and even after repeated punishment, no fade could be detected. A vacuum servo keeps normal pedal loads fairly low, but our best braking figure of 0.98g† from 30mph, registered 110lb on the gauge.

†1.0g is the acceleration or deceleration due to gravity, and also represents the theoretical maximum which normal brakes can produce in ideal conditions. A 1.0g stop from 30 mph occupies 30.6ft and from 60 mph 122.4ft (not 61.2ft).

The handbrake, worked by a stout and well positioned pull-up lever alongside the drivers seat, provides a useful emergency stop and will hold the car facing either way on a 1 in 3 hill.

### Maximum speeds

Gear:	mph	kph
O/d top	101	177
Top	99	167
O/d third	90	145
Third	82	132
Second	53	85
First	32	51

### Acceleration time from standstill

<i>Car laden as tested</i>			
Speedometer	True speed		Time seconds
	mph	kph	
32	0-30	0-48	3.9
43	0-40	0-64	6.4
54	0-50	0-80	9.1
65	0-60	0-96	13.2
77	0-70	0-113	17.9
88	0-80	0-129	24.0
99	0-90	0-145	38.7
110	0-100	0-161	—

### Braking performance

Pedal load	<i>From 30mph in neutral</i>		<i>From 60mph in neutral</i>	
	Pedal load	Retardation	Retardation	Retardation
lb		g		g
20		0.22		0.22
30		0.32		0.34
40		0.43		0.42
50		0.54		0.58
60		0.65		0.65
70		0.75		0.72
80		0.86		0.82
90		0.91		0.86
100		0.95		0.93
110		0.98		—

*Handbrake deceleration from 30mph in neutral:*  
g  
0.30

### Clutch

Pedal load: 38lb (17.2kg)  
Travel: 4in (10.2cm)

## Fuel

*Grade:* Premium (98 octane Research method)

*Test distance:* 536 miles (863km)

*Over-all consumption:* 30.0mpg (9.4 litres/100km)

*Consumption at steady speed in top and overdrive top gears*

mph	mpg	litres/100km	mpg	litres/100km
30	39.4	7.2	47.6	5.9
40	38.4	7.3	47.0	6.0
50	37.0	7.6	43.4	6.5
60	33.3	8.5	37.0	7.6
70	29.0	9.7	32.2	8.7
80	23.0	12.3	30.0	9.4
90	21.0	13.4	25.0	11.3

## Oil

*Grade:* SAE 10W/30

*Consumption over 536 miles:* Negligible

## Economy

Fuel economy is certainly not sacrificed for performance, especially when full use is made of the overdrive. Over the 745 miles we covered, which included all types of driving from town pottering to motorway and high speed testing, we recorded the surprisingly good overall figure of 30mpg. At this rate the 11¼ gallon fuel tank gives a safe range of about 300 miles. There is no reserve, but the fuel gauge is clearly marked in both gallons and litres. The large bore filler pipe, sealed by a flush fitting, quick-release cap, will accept full garage pump pressure without blowing back. On our car, however, the filler cap hinge pin was seized so the release spring was unable to do its job.

## Driving

Well shaped, body-hugging seats provide excellent support and remain comfortable even on long journeys. Their wide range of adjustment includes fully reclining squabs and a fore-and-aft movement of 7 inches. With the telescopic steering column and individual pedal adjustments there should be few people unable to find an ideal driving position. The action of the treadle accelerator is smooth and progressive, and heel-and-toe operating is easy.

Slim pillars and the full width Perspex back window reduce blind spots, making all-round vision good. The two-speed wipers cover a sensible area of the screen, and the twin-jet screenwasher is a standard fitting. A useful range of instruments, each calibrated with a metric equivalent, is set in a fascia of polished walnut to match the steering wheel rim. The dials are easy to read and well illuminated at night by switch-operated dual intensity lighting, and the warning lights are dimmed

on the 'dolls-eye' principle. All the controls and labelled switches can still be reached when the driver is wearing a seat belt.

At high revs in the lower gears engine noise becomes pronounced and there is an unpleasant exhaust resonance at 2,700rpm, otherwise the unobtrusive exhaust note and low level of wind noise make the Alpine very pleasant to drive at touring speeds. At night, the headlamp main beams are adequate for the car's performance and are dipped by a floor mounted switch.

## Interior and safety features

The interior is well trimmed in black stretch pvc, with neatly carpeted floor and a washable plastic headlining. Four over-centre clips and two spigots locate the hardtop and hold it snugly in place, effectively sealing out draughts and rain. No provision is made for a hood when the hardtop is removed, but a tonneau cover is available as an optional extra. There are no armrests on the doors, but there is one between the seats which forms the lid of a useful locker. More room for oddments is provided in the fascia glove box. A tunnel-mounted ashtray and a door-operated courtesy light are standard fittings.

Limited accommodation is provided in the back on the (very) occasional bench seat, and then only when the front seats are pushed well forward. Grown-ups would find the lack of space intolerable, but a carry-cot or a couple of small children would fit in quite well.

Safety features include seat belt mounting points, padding along the top and bottom edges of the fascia and on the steering wheel boss, two squashy sun visors, and a frame round the interior mirror.

Two sliding levers control the heating and demisting unit, with a separate switch for the fairly quiet two-speed booster fan. The small cockpit is quickly warmed, but there are one or two areas around feet and ankles which never seem to receive any warm air. Apart from this criticism the system is effective, simple to operate, and will soon disperse any screen mist. The front quarter-lights are fixed, but those at the rear can be held open on over-centre catches to provide a flow of air.

Luggage room in the Alpine is surprisingly good for a sports car. Although the spare wheel and comprehensive tool kit stand upright in the boot, there is still 10 cubic feet of usable space available for cases and bags, and there is always the space behind the front seats when no extra passengers are carried. Loading the boot is made easy by the low sill, and luggage is protected by a floor mat and side panels on the twin fuel tanks.

## Exterior

The underside of the chassis is protected against corrosion and treated with a coating of sound-deadening material. On our car, the paintwork and general exterior finish were very good indeed and all the stainless steel and chromium plated bright-work parts were free from blemishes or signs of premature rusting. Alpine GT models have hardtops in matching body colours, but black is available to order. Wheel trims and rubber-faced overriders are standard fittings, whitewall tyres are extra.

## Servicing

With no chassis points to grease, brakes which are self adjusting, and oil changes at 6,000 mile intervals, the Sunbeam needs little attention. Routine maintenance is helped by everything being easy to get at under the forward-hinging bonnet. The battery, housed below the rear seat, is fed by a 35amp alternator which can maintain a high charging rate even at idling speeds.

## Summary

The Sunbeam Alpine GT is a true GT car. It combines most of the performance and handling of a sports car with the luxuries of a well-equipped saloon. Ride and handling are perhaps not quite up to the standard of one or two of the Alpine's all-independently sprung contemporaries, but nevertheless the car remains safe and predictable, the engine willing and economical, and the well-developed chassis should ensure sound and reliable service over a long period.

## Specification

### Engine

<i>Cylinders:</i>	4 in line, water cooled
<i>Bore:</i>	3.2in (81.5mm)
<i>Stroke:</i>	3.25in (82.55mm)
<i>Capacity:</i>	1,725cc (105.2 cu in)
<i>Valve gear:</i>	Overhead (pushrod operated)
<i>Compression ratio:</i>	9.2 to 1

### Transmission

<i>Clutch:</i>	7¼in diameter Borg and Beck diaphragm type. Hydraulic operation
<i>Gearbox:</i>	Four speeds and reverse. Synchromesh on all forward ratios. (Optional extra overdrive fitted to test car)

### Over-all ratios:

<i>First:</i>	13.18
<i>Second:</i>	8.41
<i>Third:</i>	5.47
<i>O/d third:</i>	4.39

*Top:* 4.22

*O/d top:* 3.39

*and Reverse:* 14.01

*Rear axle:* Hypoid bevel 4.22 to 1

*mph per 1,000 rpm in top gear:* 16.4 (26.4kph)

*O/d top:* 20.5

(32.8kph)

## Suspension and steering

*Front:* Independent by coil springs, wishbones, telescopic dampers, and an anti-roll bar

*Rear:* Live axle on semi-elliptic springs, with telescopic dampers

*Steering:* Burman re-circulating ball

*Turning circle* – left: 32ft 10in (10.0m)

– right: 33ft 4in (10.2m)

*Turns of wheel from lock to lock:* 3¼

*Road wheel and rim size:* Pressed steel disc (spoked wheels extra)  
13 x 4½ Four stud fixing

*Tyre size:* 5.90 x 13 (Dunlop RS5 fitted to test car)

## Brakes

*Type:* Girling hydraulic discs front, drums rear

*Dimensions:* 9.85in (25.0cm) diameter discs  
9in (22.9cm) diameter drums

## Maintenance

*Engine sump:* 8 pints (4.5 litres) Grade: SAE 10W/30 Change oil and filter every 6,000 miles (10,000km)

*Gearbox (with overdrive):* 4½ pints (2.5 litres) Grade: SAE 10W/30 Change oil every 6,000 miles

*Rear axle:* 1¾ pints (1 litre) Grade: SAE 90EP Change oil every 6,000 miles

*Grease points:* None

*Cooling system:* 12½ pints (7.1 litres) including heater

*Fuel tank:* 11 gallons (50 litres) no reserve

*Tyre pressures (normal driving):* Front and rear 24psi (1.7 bars)

## Weight

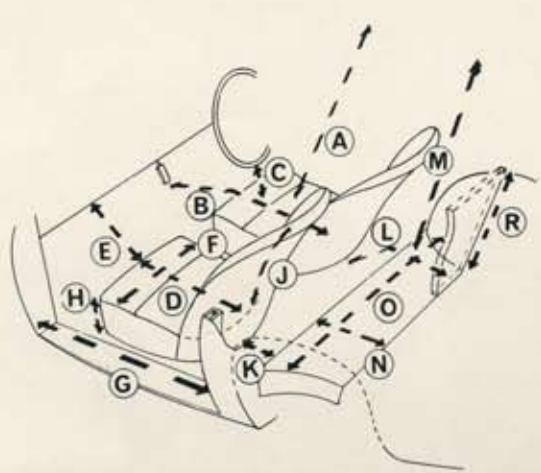
Unladen weight with full fuel tank: 19cwt 3qr 14lb (2,226lb = 1,011kg)

*Distribution of above weight* – front: 51%  
rear: 49%

**Main exterior dimensions**

Over-all length: 13ft 0in (3.96m)  
 Over-all width: 5ft 0½in (1.54m)  
 Over-all height (GT): 4ft 4½in (1.33m)  
 Wheelbase: 7ft 2in (2.18m)  
 Track: front — 4ft 3¾in (1.31m)  
           rear — 4ft 0½in (1.23m)

Ground clearance unladen: 5¾in (14.6cm)  
   below centre  
   cross-member  
 laden with two persons and  
 50lb of luggage: 5in (12.7cm) below centre  
   cross-member



**Interior dimensions**

A	35 in ( 889.0mm)
B	min 41 in (1,041.4mm) max 48 in (1,219.2mm)
C	min 6 in ( 152.4mm) max 8 in ( 203.2mm)
D	19 in ( 482.6mm)
E	min 7 in ( 177.8mm) max 13 in ( 330.2mm)
F	20 in ( 508.0mm)
G	41 in (1,041.0mm)
H	min 7 in ( 177.8mm) max 8½ in ( 215.9mm)
J	21¼ in ( 539.7mm)
K	min — max 7¼ in ( 184.1mm)
L	min — max 31 in ( 787.4mm)
M	24 in ( 609.6mm)
N	16¼ in ( 412.7mm)
O	35½ in ( 901.7mm)
R	16¼ in

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