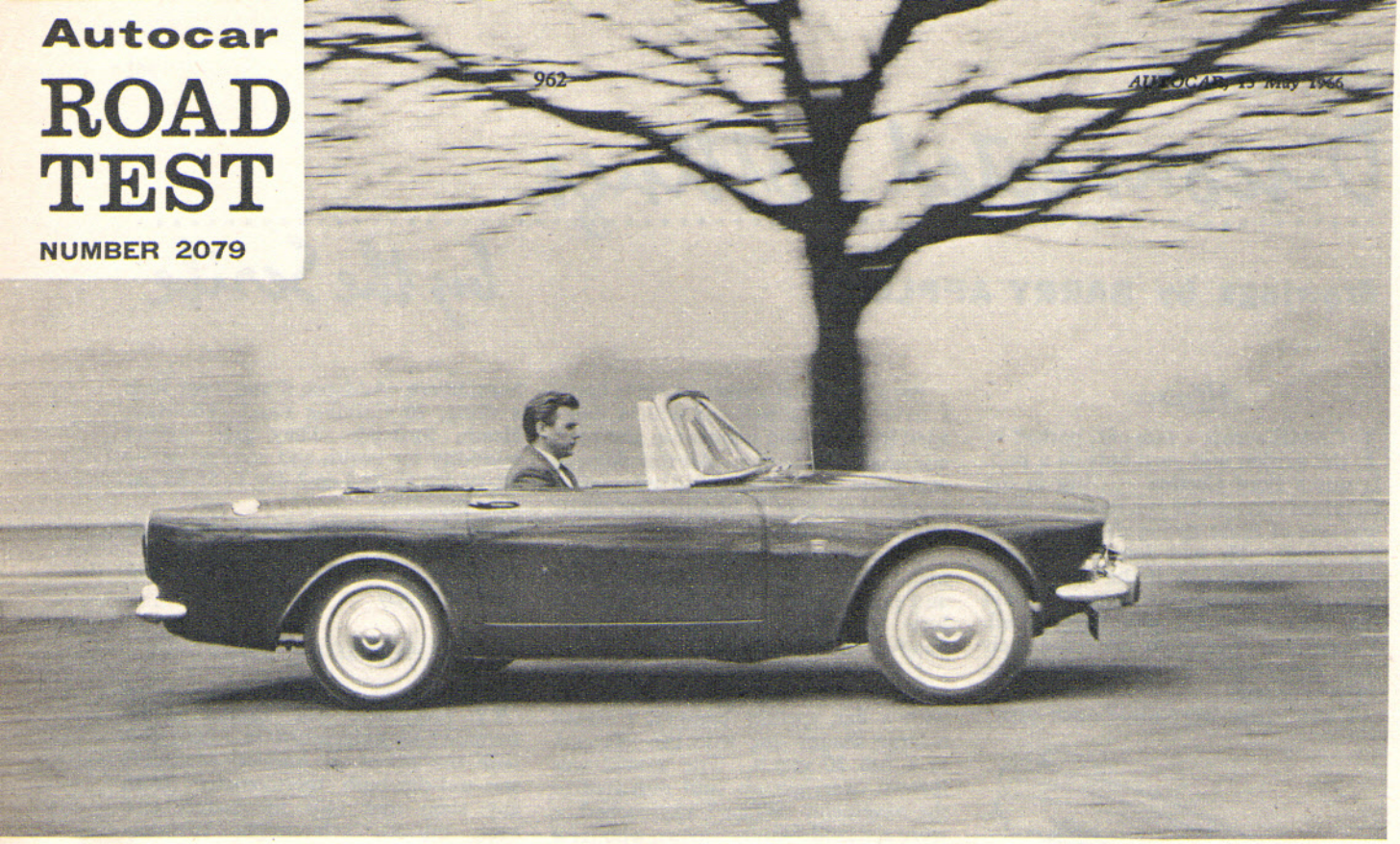
Autocar
ROAD TEST
NUMBER 2079



Sunbeam Alpine Series V

1,725 c.c.

AT A GLANCE: Established Rootes two-seater now fitted with latest five-main-bearing engine. Performance and economy improved, with less fuss. Close-ratio gearbox with optional overdrive gives a good choice of ratios. Comfortable ride and fully adjustable driving position. Safe, predictable handling and powerful, but heavy, brakes. Full range of equipment, not all of it included in basic price. Good value for money.

MANUFACTURER

Sunbeam-Talbot Ltd., Ryton-on-Dunsmore, Coventry.

PRICES

Basic	£725 0s 0d
Purchase Tax	£152 12s 1d
Total (in G.B.)	£877 12s 1d

EXTRAS (INC. P.T.)

Overdrive	£51 7s 1d
Heater	£18 2s 6d
Whitewall Dunlop Road Speed tyres	£12 16s 9d
Seat belts (each)	£3 19s 6d
Ammeter	£3 6s 0d
Clock	£7 15s 4d
Fog lamps (each)	£5 7s 9d

PERFORMANCE SUMMARY

Mean maximum speed	98 m.p.h.
Standing start quarter mile	19·1 sec
0-60 m.p.h.	13·6 sec
30-70 m.p.h. (through gears)	13·9 sec
Overall fuel consumption	25·5 m.p.g.
Miles per tankful	280

SPORTS car fashions, equipment and fittings have changed a lot in the past decade. One of the first models to break with the old he-man tradition, by offering wind-up windows, comfortable seating and plenty of space, was the Sunbeam Alpine. Introduced in 1959 with a structure based largely on a Hillman Husky floor, 1,494 c.c. 78 b.h.p. Sunbeam Rapier engine and gearbox, the Alpine has been revised several times in the intervening seven years. The engine became 1,592 c.c. for Series II, reclining seats and a smart GT hardtop model appeared in Series III, while a new hood mechanism, together with the trimming down of tail fins identified Series IV. The latest revision—to Series V—places more emphasis on mechanical improvements than before. In common with other Rootes models for 1966, the engine has been given a longer-stroke, five-main-bearing crankshaft which increases capacity to 1,725 c.c.; however, only the Alpine is fitted with twin constant-vacuum Stromberg 150CD carburettors. Though the gearbox has included synchromesh on bottom for nearly two years, the latest car has its own special close-ratio set matched to the new engine tune.

Thus equipped, along with the optional overdrive, adjustable steering column and a wide range of instruments, the Series V Alpine is a thoroughly practical sporting car offering nearly saloon car comforts at a very reasonable price. Indeed, since 1959, despite all the mechanical and styling changes, the basic price of this open sports car has increased by only £40, to £725, which is no mean achievement.

In spite of the progressive power increases and a careful control on all-up weight, Alpines are not really much quicker now than ever they were. Unfortunately we cannot make comparisons with our Series IV test car, as this was the heavier GT model with optional automatic transmission (no longer available on Series V). The last open car we tried was a Series II back in 1960, and the last manual car a series III in September 1963. Acceleration through the gears, and performance in any one gear has been marginally improved, although the real gain of the new close ratio box has been to make the latest car less fussy to drive. Even when using overdrive, and under favourable wind conditions, 100 m.p.h. was barely possible; 90 m.p.h. was none the less a comfortable cruising speed on motorways and could be maintained with little strain.

The Alpine is normally sold without overdrive, and a 3·89 axle ratio, while our test car had the overdrive and 4·22 axle ratio that goes with it. The

Autocar Road Test 2079

MAKE: **SUNBEAM**

TYPE: **Alpine Series V**

WEIGHT

Kerb weight (with oil, water, and half-full fuel tank): 20·0 cwt (2,246lb-1,020kg)
Front-rear distribution, per cent: F, 51·6; R, 48·4
Laden as tested .. 23·0 cwt (2,582lb-1,172kg)

TURNING CIRCLES

Between kerbs .. L, 31ft 8in; R, 33ft 2in.
Between walls .. L, 33ft 6in.; R, 34ft 11in.
Steering wheel turns lock-to-lock .. .. 3·6

PERFORMANCE DATA

Top gear m.p.h. per 1,000 r.p.m. .. 16·3
Overdrive top gear m.p.h. per 1,000 r.p.m. 20·3
Mean piston speed at max power 2,980 ft/min.
Engine revs at mean maximum speed (overdrive) 4,825 r.p.m.
B.h.p. per ton laden .. .. 80·0

OIL CONSUMPTION

Miles per pint (SAE 20W) 220

FUEL CONSUMPTION

At constant speeds: top and overdrive

	Top	O.D. Top		Top	O.D. Top
m.p.h.	m.p.g.	m.p.g.	m.p.h.	m.p.g.	m.p.g.
30	44·5	48·2	70	28·0	31·7
40	39·6	44·5	80	23·4	27·6
50	35·7	39·6	90	19·4	23·4
60	31·2	34·8			

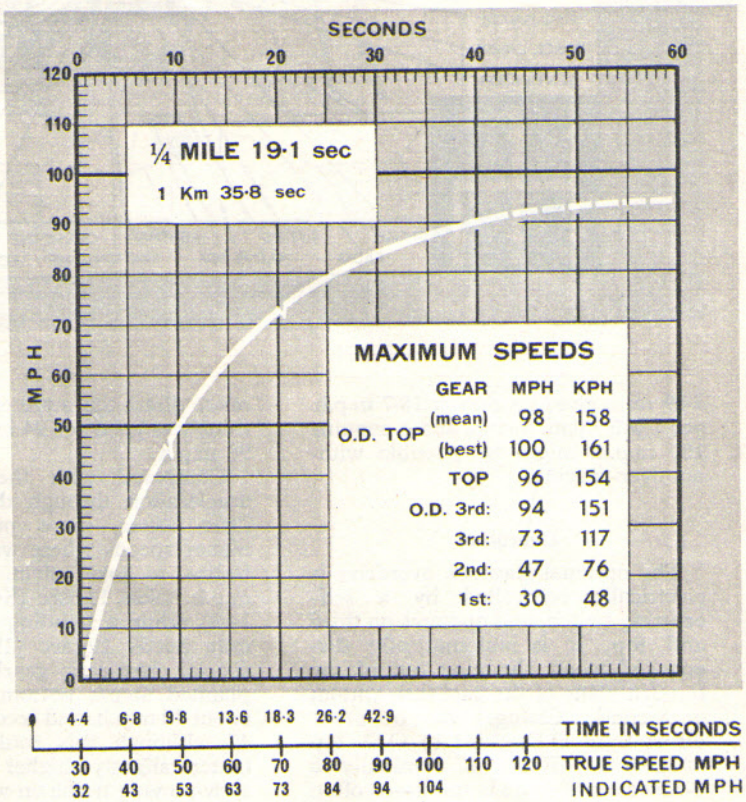
Overall m.p.g. 25·5 m.p.g. (11·1 litres/100 km)
Normal range m.p.g. .. 23-30 (12·3-9·4 litres/100km)
Test distance (corrected) .. 1,317 miles
Estimated (DIN) m.p.g. 28·8 (9·8 litres/100km)
Grade .. .. Premium (96·2-98·6 RM)

TEST CONDITIONS

Weather Dry and overcast, with 5-10 m.p.h. wind
Barometer .. .. .. 29·5in. Hg.
Temperature .. .. 7 deg. C. (45 deg. F.)
Surfaces .. .. Dry concrete and asphalt

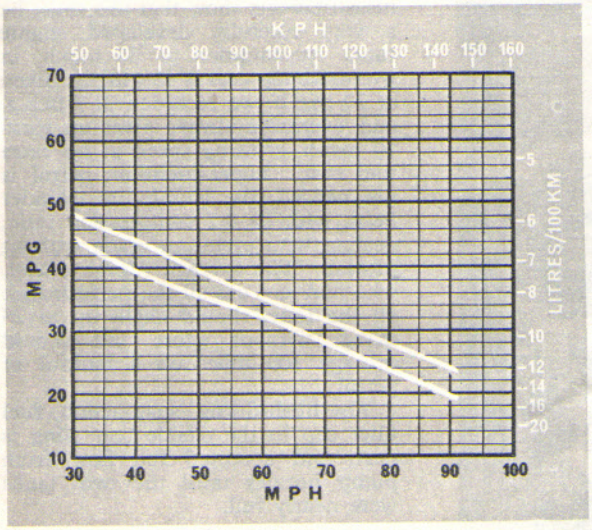
Speed range, gear ratios and time in seconds

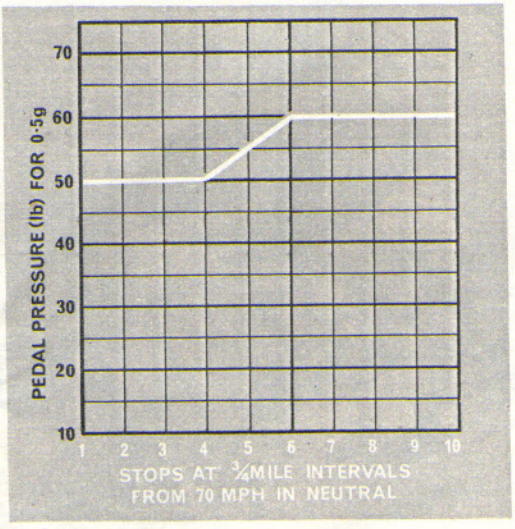
m.p.h.	O.D. Top (3·38)	Top (4·22)	O.D. Third (4·39)	Third (5·47)	Second (8·40)	First (13·17)
10—30	—	—	—	9·0	5·0	3·2
20—40	16·2	11·0	10·7	7·7	4·4	—
30—50	16·6	10·0	9·8	7·0	—	—
40—60	16·6	10·1	9·5	7·4	—	—
50—70	17·1	10·5	11·4	10·3	—	—
60—80	20·7	13·1	16·1	—	—	—
70—90	—	24·3	25·7	—	—	—

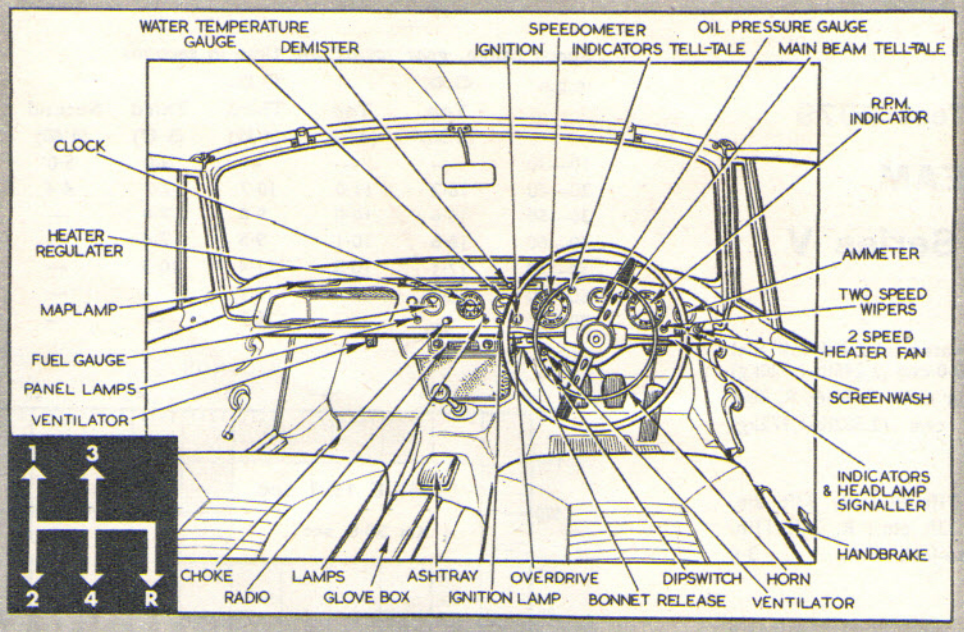


BRAKES	Pedal load	Retardation	Equiv. distance
(*from 30 m.p.h. in neutral*)	25lb	0·23g	131ft
	50lb	0·45g	67ft
	75lb	0·72g	42ft
	100lb	0·88g	34ft
	125lb	0·90g	33ft
	150lb	1·00g	30·1ft
	Handbrake	0·35g	86ft

CLUTCH Pedal load and travel: 32lb and 5in.







3·89 ratio gives gearing at 18·7 m.p.h. per 1,000 r.p.m. in top, and a genuine 100 m.p.h. might be possible without over-revving.

Overdrive

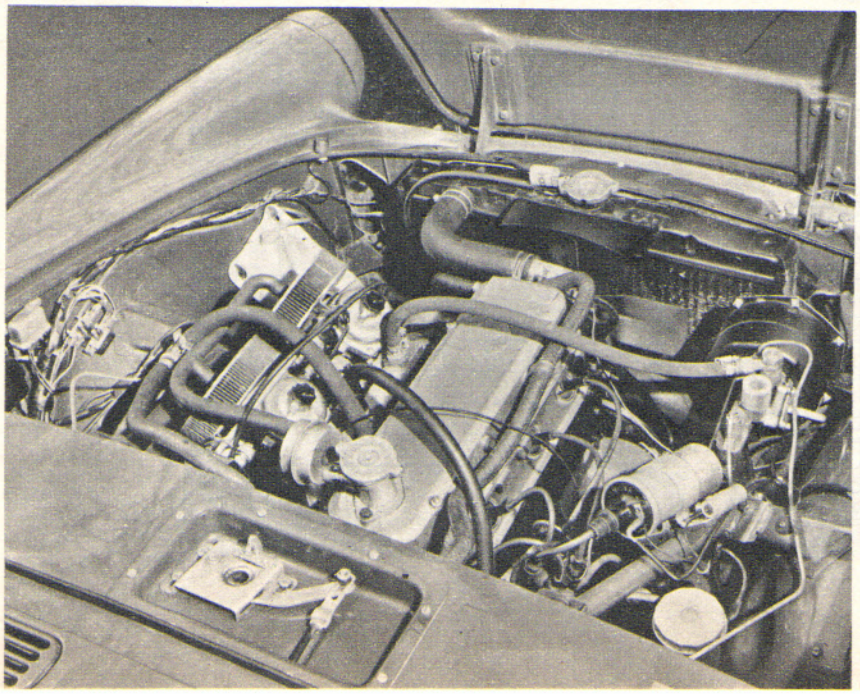
The optional Laycock overdrive is electrically controlled by a self-centring switch, and operates on third and top; it is automatically disengaged when changing out of the top-3rd plane of the gate into bottom or second. Changes can be made direct from O.D. third to O.D. top of course. What is nominally a 6-speed set of gears is spoilt—as often happens—by overdrive third and direct top having almost the same ratio. Acceleration figures in O.D. third were a little better than in direct top up to 70 m.p.h.; above this speed the extra friction in the overdrive made direct top more efficient. O.D. third was good for 94 m.p.h., and top 96 m.p.h.

Compared with the Series III, acceleration through the gears is a little better, more particularly at higher speeds where wind resistance begins to take effect. From 0-60 m.p.h. takes 13·6sec (Series III took 14·9), while a standing-start quarter-mile needs 19·1sec (19·8sec). The special close-ratio gearbox has well-planned steps; bottom is good for about 30 m.p.h. and second goes on to 47, although this could have been better slightly higher for passing slow-moving traffic on winding roads.

The Alpine engine is only mildly tuned—with 53 b.h.p./litre—and is a very docile unit for slow, town work. Carburation is good and the engine runs evenly at all speeds; however towards the end of the test period the plugs gave trouble and had to be replaced. It pulls strongly without snatch from as low as 1,000 r.p.m., and is still breathing well when the rev counter needle enters the danger zone starting at 6,000 r.p.m. (We limited speeds in all the gears to this figure.) There was quite a lot of induction noise and our road test car produced a painful grating resonance through the throttle linkage, which eventually fell apart.

The Alpine is easy to start from cold, but needs a lot of choke during the first few minutes running. Difficult hot-starting was one of the troubles with the earlier Sunbeam Alpines; we were particularly pleased to find that the Stromberg carburettors seem to have cured this at last.

The Alpine Series V is the only Rootes model to have twin Stromberg 150CD carburettors. Piping from the cylinder head to inlet manifold looks after closed-circuit crankcase breathing



Fuel Consumption

Most of our staff like driving comfortable sporting cars, and one or two found excuses to rush off on journeys in the Sunbeam. Nearly everyone drove it quickly where traffic conditions allowed, so that the overall fuel consumption figure—25·5 m.p.g.—is very good. Our constant-speed measurements show that this must be a very carefully developed engine tune; consumption at 30 m.p.h. in overdrive top gear is 48·4 m.p.g. Even at 70 m.p.h. we recorded 31·7 m.p.g. and overdrive always gives an extra 10 m.p.h. cruising speed at no extra fuel cost. Super-premium petrol is not needed, the aluminium cylinder head, with its 9·2 compression ratio, dealing with premium grade without protest. The average Alpine owner, who may not use all the performance all the time, should chalk up to 28 m.p.g. without effort and should manage 300 miles on a tankful of petrol.

The flush-fitting, snap-action, fuel filler cap in the offside rear wing is neat, and accepted full flow from pump nozzles until the twin tanks were nearly full.

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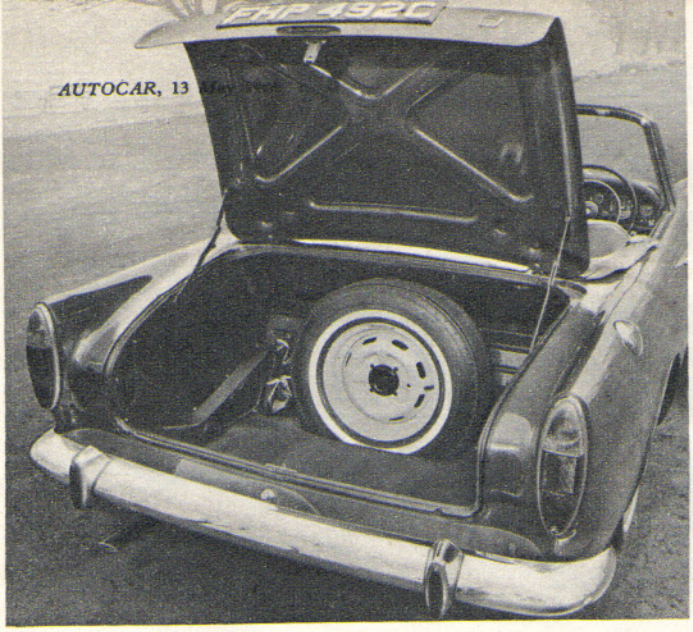

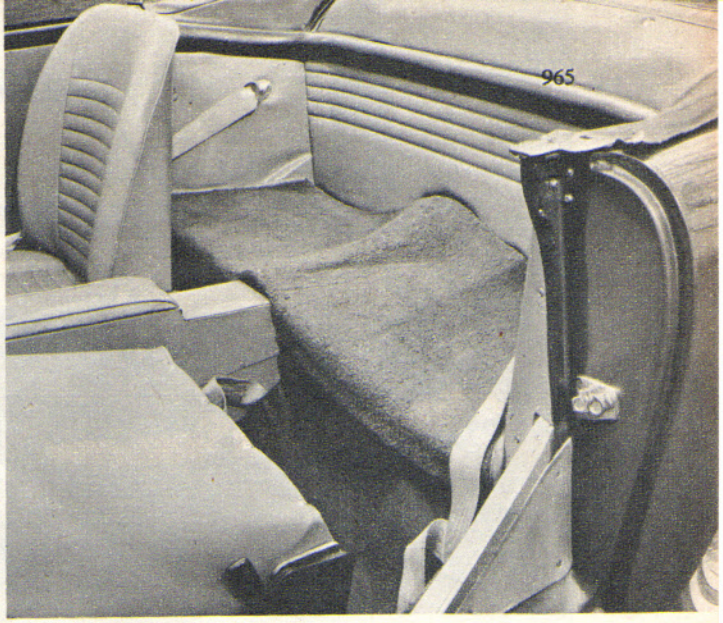

Above:
By stowing the spare wheel vertically, there is a reasonable amount of luggage space. Twin fuel tanks are fitted, one in each rear wing. The bumper over-riders are rubber padded

Above right:
This carpeted shelf behind the front seats is not meant to carry people, as there is no legroom. Its base lifts to reveal the battery. The hood is concealed under the tonneau when folded

Right:
Facia of the open Sunbeam Alpine is trimmed with leathercloth. The heater, clock, radio and ammeter are all extras. The glove box between the front seats is lockable

Suspension is supple, and reminds one of several continental sports cars rather than its obvious British competitors. The optional Road Speed tyres help the basically very sound suspension balance to produce really safe, predictable road holding. The steering is low geared, and strongly self-centring; this gives the impression of considerable understeer when entering sharp bends. Twisting roads are best tackled with some verve because the combination of a fairly heavy car and a front-end which tends to plough safely towards the outside of bends makes a normal approach hard work. In fact, the car is well-balanced enough to allow it to be set up in advance and help the tail to come round. On a long bend, the understeer gradually and predictably changes to a more neutral attitude, which is almost automatically corrected by slight wheel movements.

Suspension

That this is after all a fairly firmly sprung sports car becomes apparent when driving over rough ground. On the M.I.R.A. washboard surface the body felt especially rigid at normal speeds, although anything below 20 m.p.h. caused the scuttle and screen to shake around quite appreciably. At 60 m.p.h. there was virtually no vibration at all. Ride on the *pavé* was good, but the simple rear suspension (by half-elliptic springs and a live axle) has limitations of movement and control; there was appreciable axle-hop, and these movements tended to tweak the rear of the car sideways quite abruptly. Long-wave pitches proved rather unpleasant, as the car bucked up at the rear first, above 50 m.p.h.

All that needs to be said about the brakes is that they are a servo-assisted Girling, mixed disc-drum system. Firm and progressive, with excellent "feel" and apparently very resistant to fade, they are as safe and predictable as we would expect. Surprisingly high pedal pressures are required from the servo-assisted system for it takes a manly push of 150lb to record 1·0g braking.

Leverage on the pull-up handbrake, mounted snugly between the driver's door and the seat, is almost ideal, but a strong tug is needed to prevent the car from rolling back on a 1-in-3 test hill. Restart was easy and immediate. Use of the handbrake in emergencies would only produce about 0·25g. The window winding handle has at last been moved so that it is now well clear of the handbrake lever.

Driving Position

Drivers of all shapes and sizes quickly make themselves comfortable in the Alpine, for the driving position is adjustable in several ways. Not only can the seats be moved back and forward as usual (through 6in.), and their deep backrests adjusted for rake through a wide range, but the steering column is adjustable for reach and the pedal cluster can be moved with the aid of a spanner. Steering column adjustment is particularly simple. The boss in the centre of the wheel is turned to release the clamp, and the wheel can then be moved back and forth through 2·5in. and locked in any intermediate position. Padded rolls on the seat cushion and backrest locate driver and passenger very securely; no effort is needed to hold oneself in place when cornering hard

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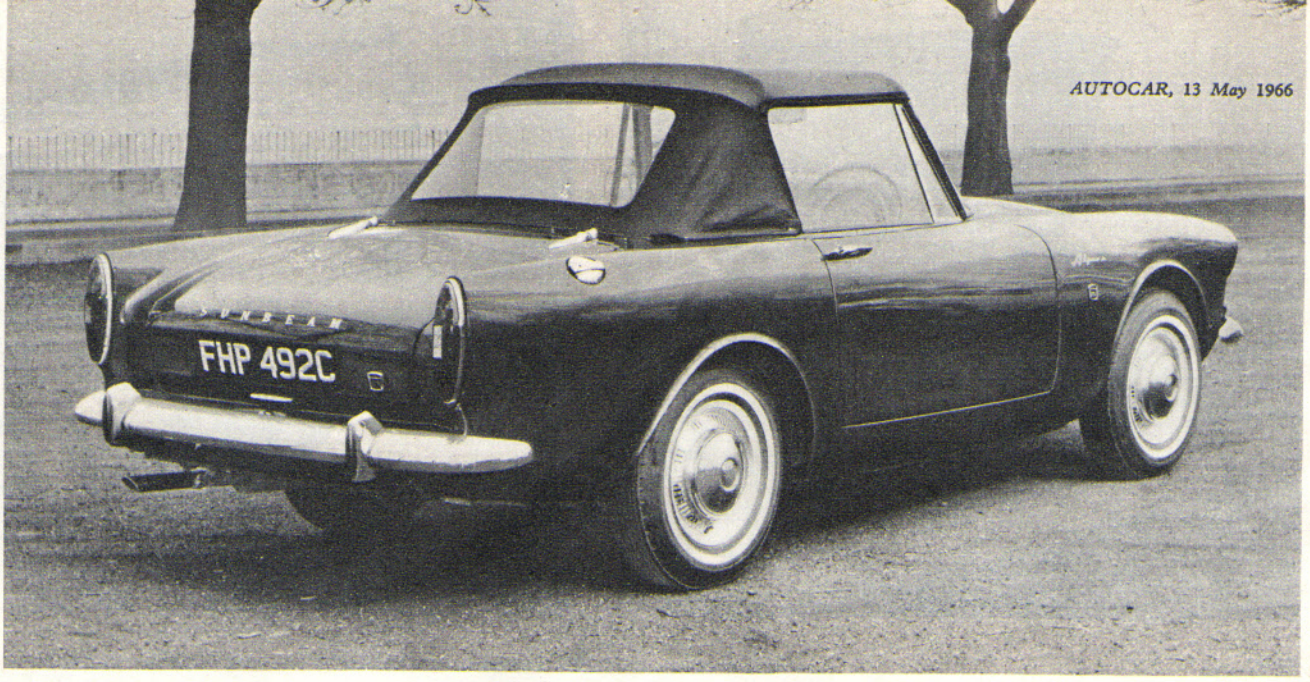
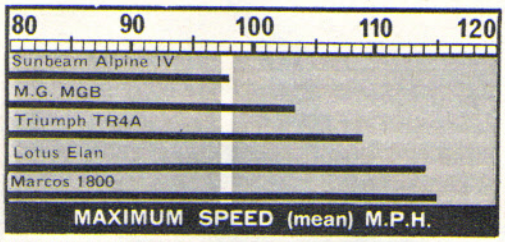
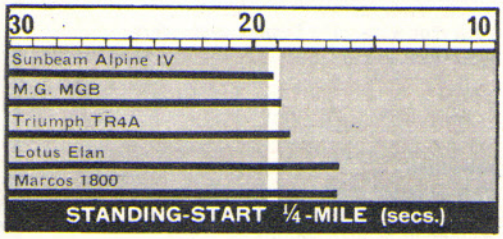


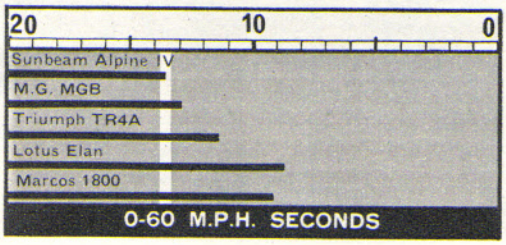
TOTAL PRICE	£878
	£855
	£968
	£1,436
	£1,639

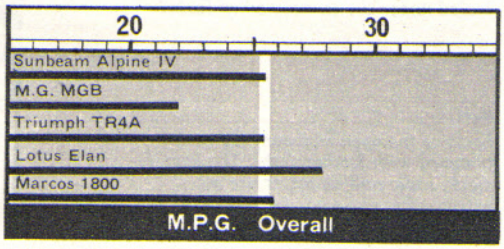




HOW THE SUNBEAM ALPINE SERIES V COMPARES:

Sunbeam Alpine V . . .





With front seats in their normal position, there is really no room for people to sit on the carpeted shelf behind. One adult might just squeeze in—sideways and uncomfortably—for short distances, but children would manage better, as with the hood up headroom is limited. The base of the shelf lifts to reveal the battery, well away from engine and transmission heat.

Stowage Space

This shelf is really intended as extra stowage space for coats and maybe a picnic hamper. There is a small open compartment in front of the passenger (with a map reading lamp above it, and a grab handle in its padded lip), while an oblong, locking box is mounted between the seats as an armrest. Neither is big enough, however, for a camera or lady's handbag.

Road test Alpines usually arrive with a full range of instruments and of these the ammeter and accurate clock are still extras. Blanking plates are easily removed to fit them into the leathercloth covered panel. (On the alternative GT model the facia is polished walnut). Rootes instruments are always crisply styled and plainly calibrated with white figures on a black ground, and Dayglo red pointers. The fuel gauge is marked in gallons and litres, and the speedometer has a secondary kilometer scale. The all-important oil pressure gauge is immediately in front of the driver, between the speedometer and rev counter, whereas the other minor instruments, controls and switches are scattered around the panel. Sensibly, the wiper switch and washer button are next to each other.

Headlamp mainbeam and indicator warning lights have roll-down lenses special to Rootes which can be adjusted like tiny translucent eyelids to reduce the glare at night. The overdrive tell-tale is no longer fitted.

Pedal layout is excellent. The organ-pedal throttle control enables easy heel-and-toe changes; when the left foot is not working the clutch it can be rested on the rubber cap of the dipswitch, tight up against the tunnel.

With such a well-planned interior, and luxuries such as the oil cooler and folding hood, we were surprised to find that a heater costs over £18 extra. (It is, however, standard on the GT.) Plenty of really warm air is supplied, but there are no face level vents, and it it is impossible to send cool air on to the screen while heating the footwells. New on the Series V, however, are independent cold air vents which channel ram-air into the footwells at knee height, a refreshing feature for heat waves and hot climates.

Hood

The Alpine has always offered a neat, easily stowed hood, but there have been further refinements in the last couple of years. Stability and good sealing around the door glasses are assured by using rigid members from the screen to the hood pivots behind the seats (these bars fold down for stowage). A rigid bar with four positive fastenings fits snugly against the screen rail, and above the door glasses twin lengths of nylon burr zips bind the fabric to the fold- ▶

ing rails and ensure an air-tight fit. When performed in the correct sequence, hood stowage is quick and easy. The hinged steel panels of earlier models have gone, and the hood now disappears into a short, full-width box with built-in tonneau cover which neatly covers the folded fabric, or the hole when the hood is erect.

Door glasses, with fixed quarter lights, and the deep screen, fend off most of the wind when the hood is down, but above about 70 m.p.h. there is quite a lot of turbulence and back draught.

Maintenance is down to a practical minimum. There are no greasing points at all, and oil changes are at 6,000-mile intervals. The dipstick is short and inaccessible, hiding between the distributor and the oil filter, and masked by the coil and a scuttle stiffening tube.

No one seriously expects sports cars to be draughty, noisy and uncomfortable these days. Complete weather protection, comfortable seats and adequate luggage room, with docile road manners and close to 100 m.p.h. are now demanded by the enthusiast. The Alpine Series V provides all these and, although approaching its seventh birthday in July, continual improvements in equipment and power output have maintained its competitive position. ■

SPECIFICATION : SUNBEAM ALPINE, SERIES V, FRONT ENGINE, REAR-WHEEL DRIVE

ENGINE

Cylinders	4 in-line
Cooling system	Water; pump, fan and thermostat
Bore	81·5mm (3·21in.)
Stroke	82·55mm (3·25in.)
Displacement	1,725 c.c. (105·2 cu. in.)
Valve gear	Overhead, pushrods and rockers
Compression ratio	9·2-to-1
Carburettors	2 Stromberg 150 CD
Fuel pump	AC mechanical
Oil filter	Fram full flow
Max. power	92·5 b.h.p. (net) at 5,500 r.p.m.
Max. torque	110 lb. ft. (net) at 3,700 r.p.m.

TRANSMISSION

Clutch	Borg and Beck diaphragm spring, 7·5in. dia.
Gearbox	4-speed, all synchromesh
Gear ratios	OD Top 0·80; top 1·00; OD third 1·04; third 1·30; second 2·00; first 3·12; reverse 3·35
Final drive	Hypoid bevel, 4·22-to-1 (with overdrive)

CHASSIS AND BODY

Construction	Integral with pressed steel body

SUSPENSION

Front	Independent, coil springs and wishbones, anti-roll bar, telescopic dampers
Rear	Live-axle, half-elliptic leaf springs telescopic dampers

STEERING

Type	Burman, recirculating-ball. Wheel dia. 15·5in.

BRAKES

Make and type	Girling disc front, drum rear. Servo: Girling vacuum type
Dimensions	F, 9·85in. dia.; R, 9·0in. dia.; 1·75in. wide shoes
Swept area	F, 196 sq. in.; R, 99 sq. in. Total 295 sq. in. (256 sq. in.) per ton laden

WHEELS

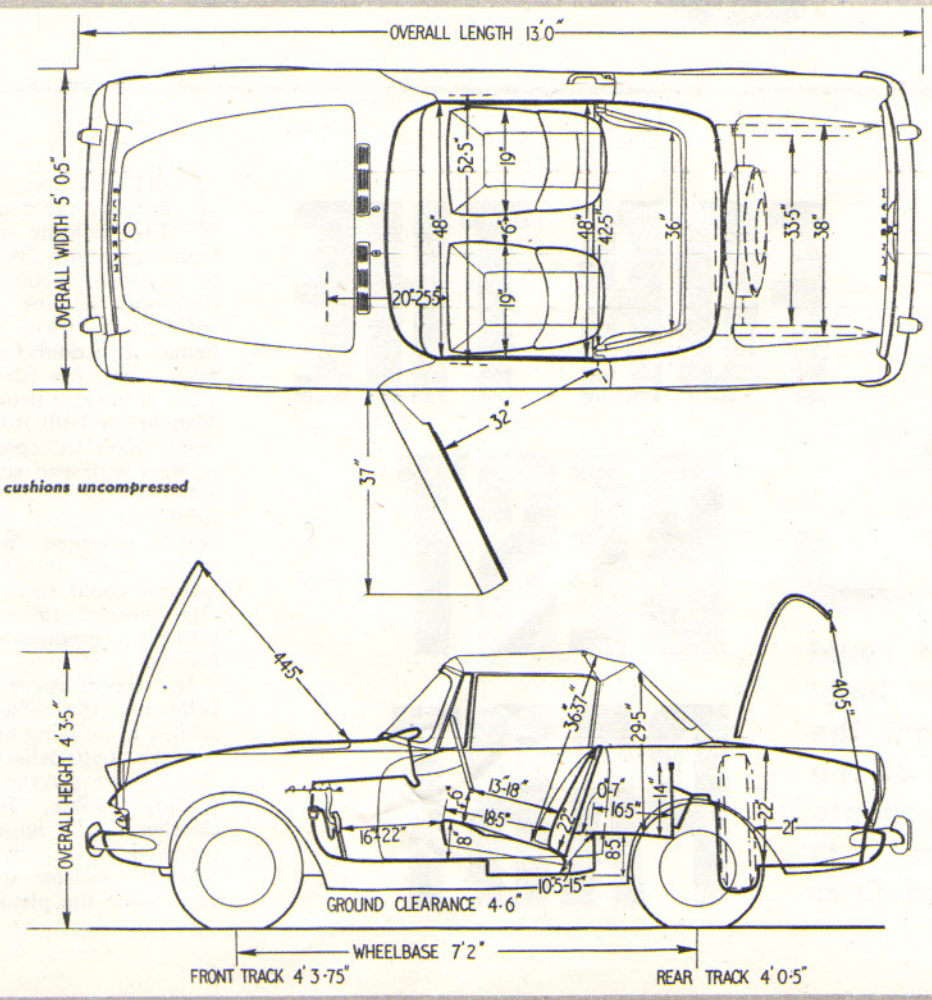
Type	Pressed steel disc, five studs 4·5in. wide rim
Tyres	Dunlop C.41 tubeless—size 6·00 13in. (optional Dunlop RSS 5·90-13in. fitted to test car)

EQUIPMENT

Battery	12-volt 43-amp. hr.
Alternator	Lucas 10AC, 35 amp.
Headlamps	Lucas sealed beam 60-45 watt
Reversing lamp	Extra
Electric fuses	2
Screen wipers	2-speed, self parking
Screen washer	Standard, manual plunger
Interior heater	Extra, fresh air type
Safety belts	Extra, anchorages built in
Interior trim	Pvc seats, Everflex hood
Floor covering	Rubber mats
Starting handle	No provision
Jack	Screw pillar
Jacking points	4, at each corner
Other bodies	Hardtop G.T.

MAINTENANCE

Fuel tank	11·25 Imp. gallons (no reserve) (50 litres)
Cooling system	12·5 pints (including heater) (7·1 litres)
Engine sump	8·25 pints (4·5 litres) SAE 20W or 10W/30 (including oil cooler) Change oil every 6,000 miles; change filter element every 6,000 miles
Gearbox and overdrive	4·5 pints SAE 10/50. Change oil every 6,000 miles
Final drive	1·75 pints SAE 90EP. Change oil every 6,000 miles
Grease	No points
Tyre pressures	F, 24; R, 24 p.s.i. (normal driving) F, 24; R, 26 p.s.i. (fast driving)



Scale ½in to 1ft cushions uncompressed