

MOTOR ROAD TEST No. 28/66 • Volvo 132S



The high-waisted body style looks more dated from the inside than from the outside.

1780

Quality and performance

'... a reputation for strength and durability ...'



PEOPLE who are not closely familiar with the Volvo marque will probably be surprised to learn that the present series of saloons was first introduced—as the Volvo Amazon—almost exactly 10 years ago, in 1956. For a car which was not designed ahead of its time but merely to the best standards of the day, and in the fiercely competitive 1½-2 litre market, 10 years is a long time. But numerous rally successes plus quality have maintained sales at a high level and built up a reputation for strength and durability, while some pioneering work on the fitment and design of seatbelts (carried out while Ralph Nader was still at law school) has established a similar reputation for safety. And from the original Amazon (the name still used in Sweden) has sprung a range composed of various combinations of three different body-styles—four-door saloon, two-door coupé and estate car—and two different versions of the 1,780 c.c. engine—68 b.h.p. and 86 b.h.p.

By comparison with recent designs, however, the 132S Volvo that we tested (with the two-door body introduced early this year

and the 86 b.h.p. engine) is beginning to show its age a little. The high-waisted, high-scuttled body with its shallow windows and thick pillars gives a distinctly claustrophobic impression to anyone accustomed to the light and airy interiors of more modern cars, and the driving position, with the seat set too close to a high steering wheel, is of the sort that turns us all into little old men trying to peer through the spokes.

The handling of the Volvo, moreover, is indifferent when compared to one or two of its closest rivals: on corners initial understeer changes to roll oversteer and the live rear axle hops badly if the surface is not smooth. The ride, too, falls below the standards of its competitors, with pitching and the violent transmission of road shocks, while the engine emits a loud intake roar.

But, in compensation, the seats are extremely comfortable and adjustable in a wide variety of ways, the gearbox is pleasant, the car has a long stride and, at £1,101, the price is moderate for the quality and performance.

Performance and economy

When starting off in the mornings a little choke is needed, but more to eliminate hesitation and obtain clean pulling for the first mile

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PRICE: £910 plus £191 2s 11d purchase tax equals £1,101 2s 11d.

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Volvo 132S

continued



Performance

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Conditions

Weather: Cool and dry.
 Temperature 53°-54°F. Barometer 29.6-29.7 in. Hg.
 Surface: Dry concrete and tarmacadam.
 Fuel 98 octane (R.M.).

Maximum speeds

	m.p.h.
Mean lap speed banked circuit	96.3
Best one-way ¼-mile	101.2
3rd gear	80.0
2nd gear	55.0
1st gear	36.0
"Maximile" speed: (Timed quarter mile after 1 mile accelerating from rest)	93.8
Mean:	93.8
Best	97.8

Acceleration times

m.p.h.	sec.	3rd
0-30	4.0	7.2
0-40	6.2	7.3
0-50	8.9	7.2
0-60	12.8	7.2
0-70	18.0	7.2
0-80	26.0	8.8
0-90	39.5	13.3
Standing quarter mile	19.4	—

m.p.h.	Top	sec.	3rd
10-30	—	—	7.2
20-40	10.4	—	7.2
30-50	10.4	—	7.2
40-60	10.5	—	7.2
50-70	11.5	—	8.8
60-80	14.5	—	13.3
70-90	22.8	—	—

Hill climbing

At steady speed	lb./ton
Top	1 in 9.1 (Tapley 245)
3rd	1 in 6.2 (Tapley 358)
2nd	1 in 4.2 (Tapley 515)

Brakes

Pedal pressure, deceleration and equivalent stopping distance from 30 m.p.h.	g	ft.
25	0.21	143
50	0.45	67
75	0.62	48½
100	0.77	39
125	0.94	32
Handbrake	0.36	83½

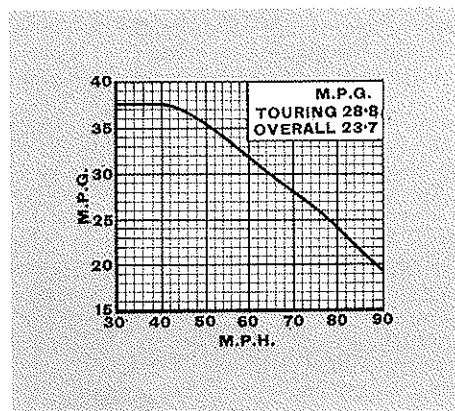
Fade test

20 stops at ½g deceleration at 1 min. intervals from a speed midway between 30 m.p.h. and maximum speed (=63.2 m.p.h.)

Pedal force at beginning	lb.
Pedal force at beginning	68
Pedal force at 10th stop	82
Pedal force at 20th stop	91

Fuel consumption

Touring (consumption midway between 30 m.p.h. and maximum less 5% allowance for acceleration) 28.8 m.p.g.



Overall	23.7 m.p.g. (= 11.9 litres/100 km.)
Total test distance	1,140 miles
Tank capacity (maker's figure)	10 gal.

Steering

Turning circle between kerbs:	ft.
Left	31½
Right	29¾
Turns of steering wheel from lock to lock	3½
Steering wheel deflection for 50 ft. diameter circle	1.1 turns

Clutch

Free pedal movement	½ in.
Additional movement to disengage clutch completely	3½ in.
Maximum pedal load	43 lb.

Speedometer

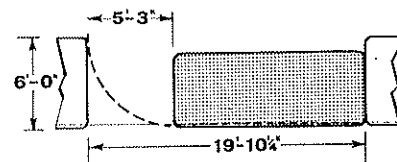
Indicated	10 20 30 40 50 60 70 80 90
True	10 17½ 27 36 45 55 64 73½ 82½
Distance recorder	7% fast

Weight

Kerb weight (unladen with fuel for approximately 50 miles) 20.8 cwt
 Front/rear distribution 54/46
 Weight laden as tested 24.6 cwt.

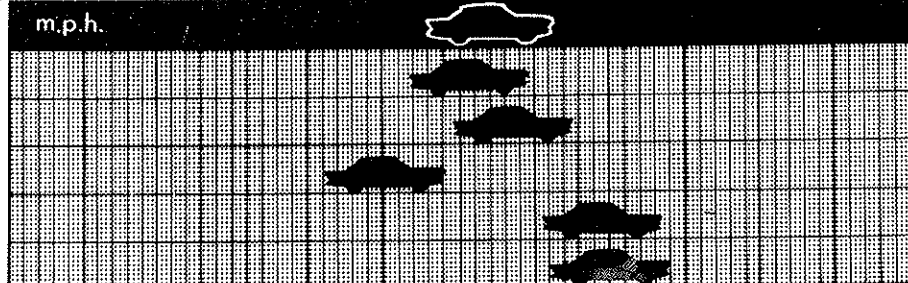
Parkability

Gap needed to clear a 6ft. wide obstruction parked in front



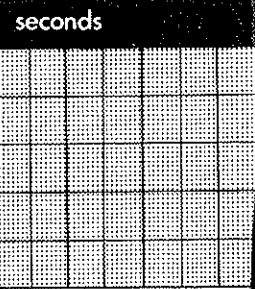
MAXIMUM SPEED

60 65 70 75 80 85 90 95 100 105 110 115 120



ACCELERATION

22 20 18



Volvo 132S coupé
 £1,101

Number Sceptre II
 £1,029 with o/d

Triumph 2000
 £1,180

Auto Union Audi
 £1,147

Alfa Romeo Giulia T1
 £1,298

Rover 2000
 £1,293



Front seats tilt forward for access to the rear and lock in position when upright.

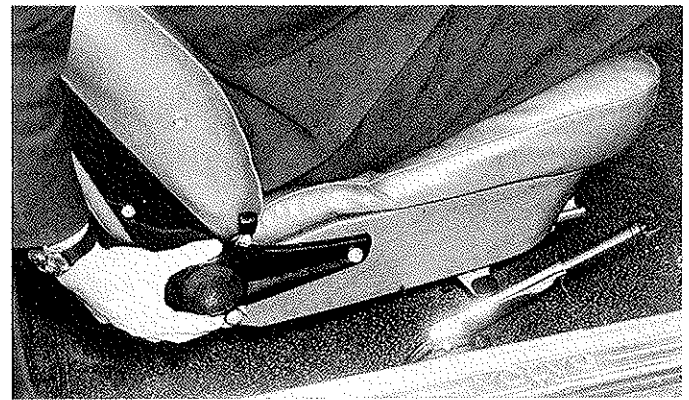


Front seats have limited fore-and-aft adjustment.

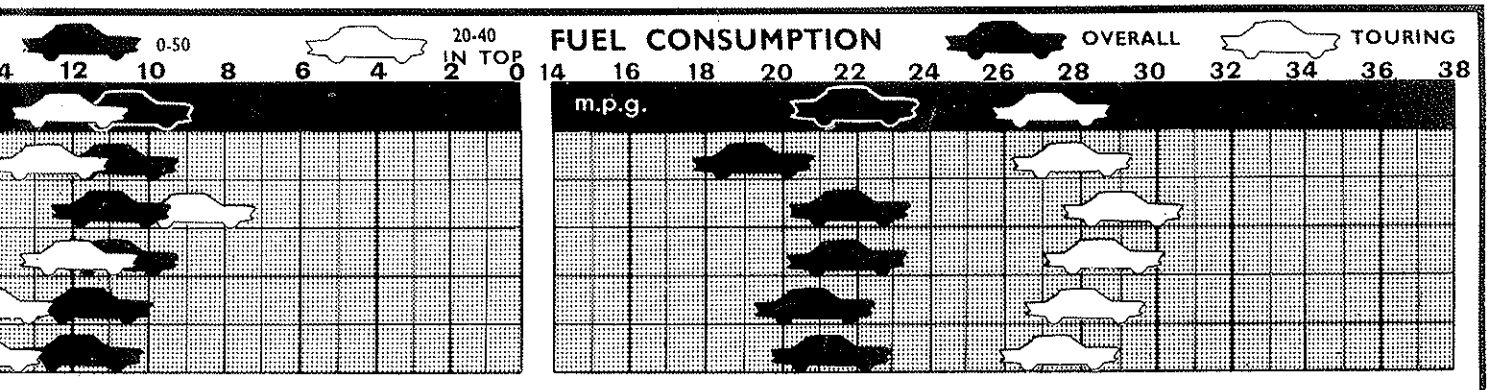
or so than for actual starting. Once the engine is warmed up it shows itself to be lively and willing rather than refined—smoothness is only moderate for a five-bearing four—and there is considerable intake roar when the engine is revving hard. With a power increase from 80 (net) b.h.p. to 86 b.h.p. (introduced last August), and a little less weight, performance is very good and the 132S was considerably faster than the four-door 122S that we tested in 1962. Top speed was 96.3 m.p.h. compared with 94.8 m.p.h., while 60 m.p.h. was reached from a standstill in 12.8 sec., compared to the 14.2 sec. needed by the 122S. Performance of this kind took the effort from long journeys and allowed motorway cruising at 85 m.p.h., or over 90 m.p.h. on the optimistic speedometer, but after a time this was made tiring by the hard rasping noises from under the bonnet. One solution would be the fitment of an overdrive, but in the saloon range of cars this is currently only available in England on the 122S (it is standard on the P1800S sports car). Another—judging by their appearance—might be to redesign the aircleaners to make them more effective as intake silencers.

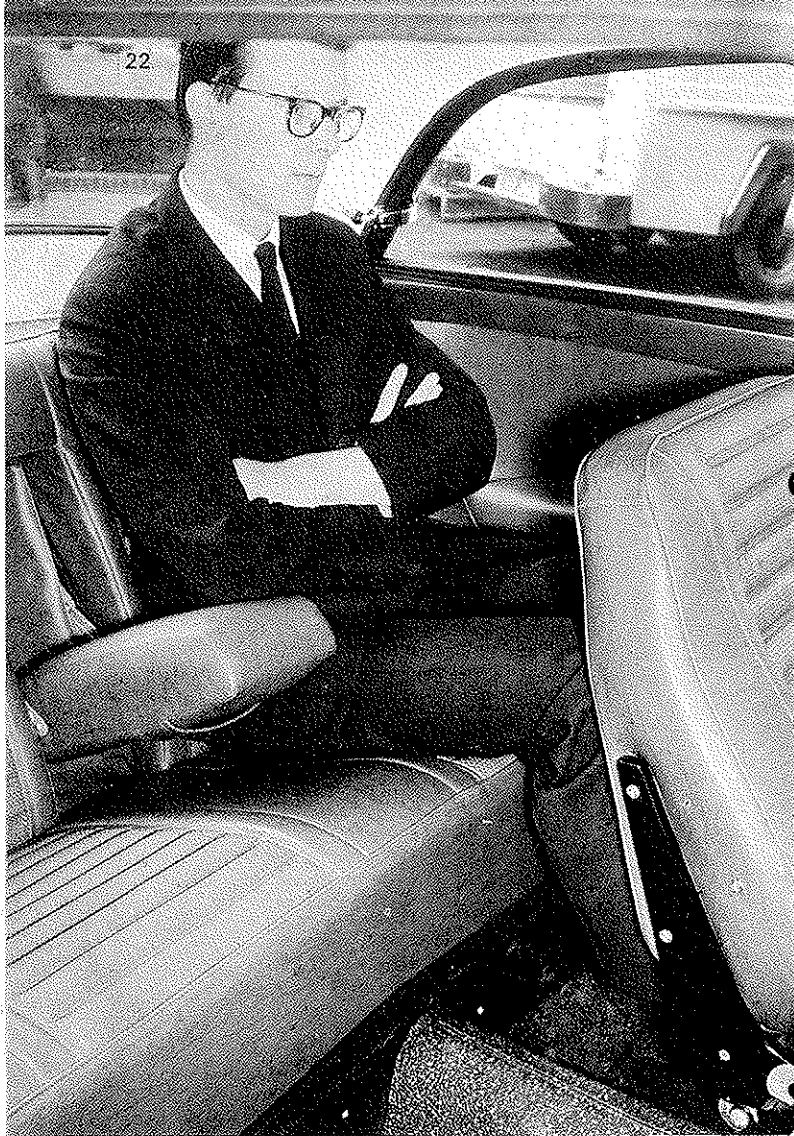
Despite hard driving fuel consumption remained a creditable 23.7 m.p.g. of premium grade, and most owners will probably get nearer to the touring consumption figure of 28.8 m.p.g.

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Front seats are extremely comfortable and can be adjusted in a variety of ways in addition to the normal fore-and-aft and rake. One of these—for 'lumbar support'—is accessible by screw-driver through the eyelet hole above the rake adjusting knob





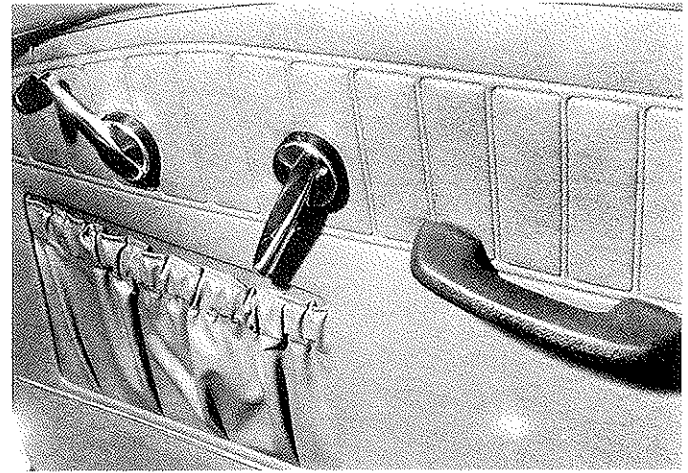
Rear head and legroom is adequate for six-footers with the front seat fully back.

Volvo 132S

continued

Safety check list

1 Steering assembly	
Steering box position	Ahead of axle line
Steering column collapsible?	Designed to crumple and fitted with fabric coupling for jack-knifing
Steering wheel boss padded?	No
2 Instrument panel	
Projecting switches, etc.	Large round knobs for lights, wipers, fan and cigaret lighter.
Sharp instrument cowls, etc.?	Flexible grab handle
Effective padding?	None
	On top half of fascia
3 Ejection	
Anti-burst door latches?	No
Child-proof door locks?	No, but only two doors
4 Windscreen	Laminated
5 Door structures	
Interior door handles, etc.	Projecting
Front quarter light catches	Projecting
6 Back of front seats	Frame not padded; seats locked into position
7 Windscreen pillar	Unpadded metal frame
8 Driving mirror	
Framed?	Yes
Collapsible?	Yes
9 Safety harness	
Type (on test car)	3-point Volvo
Anchorage	Pillar and two floor mountings built in



Texture, colour and design of door trim has a rather dated appearance.

Transmission

One of the most pleasant features of the car is the gearbox, despite the unfashionably long gearlever. The change was light, with effective synchromesh, but occasionally a little notchy; the clutch, although rather heavy, was smooth and free of slip and easy to co-ordinate with the gearchange. Ratios were well-chosen and sporting. A maximum of 36 m.p.h. was possible in first—which is perhaps a little too “sporting” since a restart was only just achieved on a 1-in-3 slope—55 m.p.h. could be attained in second, and the astonishingly high true maximum of 80 m.p.h. (86½ indicated) in third. Overtaking lorries is *not* a problem in the Volvo.

Handling and brakes

The general handling characteristics of the Volvo can best be summed up by the designation “lurch”: there is a good deal of roll on corners, and the transition from a large roll angle in one direction to a large roll angle in the other at every turn in the road soon begins to obtrude on the driver. This is particularly so because the initial understeer which the car exhibits changes to oversteer as the roll builds up, an effect which is especially noticeable in the wet. Despite location by double trailing arms and a Panhard rod, the live rear axle hops badly on moderately bumpy surfaces and wheel-spin is easy to achieve in the wet. A heavy foot and a low gear, however, do not generally induce axle tramp.

A good deal of feedback can be felt through the steering which is light but without the positive feeling usually associated with kickback, although it is in no way slack or soggy. Pirelli Cinturato tyres were fitted to our test car, but Firestone or Goodyear tyres are now being fitted to this Volvo model.

Although an acceptable 0.94g maximum deceleration was achieved on braking, a pedal pressure of 125 lb. was needed to attain it. A more reasonable value would be 100 lb. pedal pressure for maximum deceleration, while the best modern systems require about 80 lb. pedal pressure for a 1g stop. In addition, fade was quite marked during our test, with pedal pressure increasing by over 20 lb. The watersplash, however, left the brakes unaffected, and the handbrake held the car on a 1-in-3 gradient.

Spare wheel and irregular shape makes boot stowage difficult.



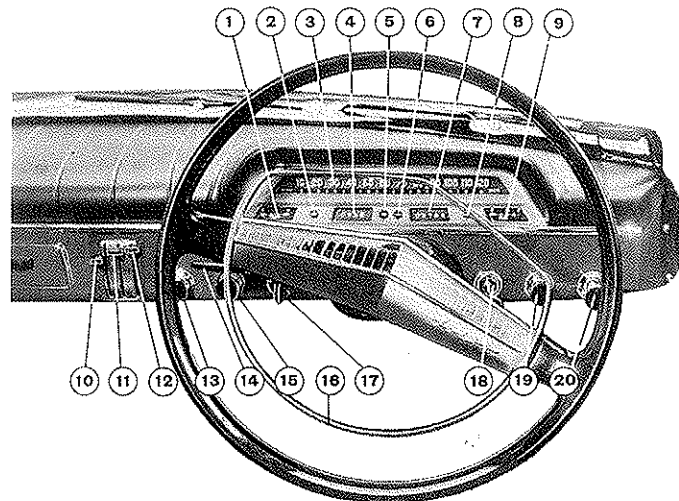
Comfort and controls

Bumpy surfaces induced strong pitching, and road shocks were violently transmitted into the car, both as noise and as vibration, even on relatively smooth surfaces. These faults were partly redeemed by the comfort of the high-backed seats which, in addition to the conventional fore-and-aft and rake adjustments, could be altered in several other ways. First there is a screw adjustment for "lumbar support", which means varying the size of the bulge in the backrest, then the whole seat can be tilted from the front by another screw adjustment, or bodily raised or lowered by yet another.

Apart from the high scuttle and steering wheel already mentioned, and from the fact that the driver's seat will not move far enough back, the driving position is otherwise good, with the gearlever, pedals and handbrake all well located in relation to each other. As for minor controls, the flasher/indicator stalk and the horn ring are within fingertip reach, while the lights and wiper switches are on the fascia. The wiper switch is pulled out one notch for low-speed working, a second notch for high-speed working and a third for wash-and-wipe, with the result that when the knob was pulled out from the low to the high speed position to clear the spray thrown up by a preceding vehicle, it was almost always pulled out too far, thus operating the washer and obscuring the windscreen still further instead of clearing it.

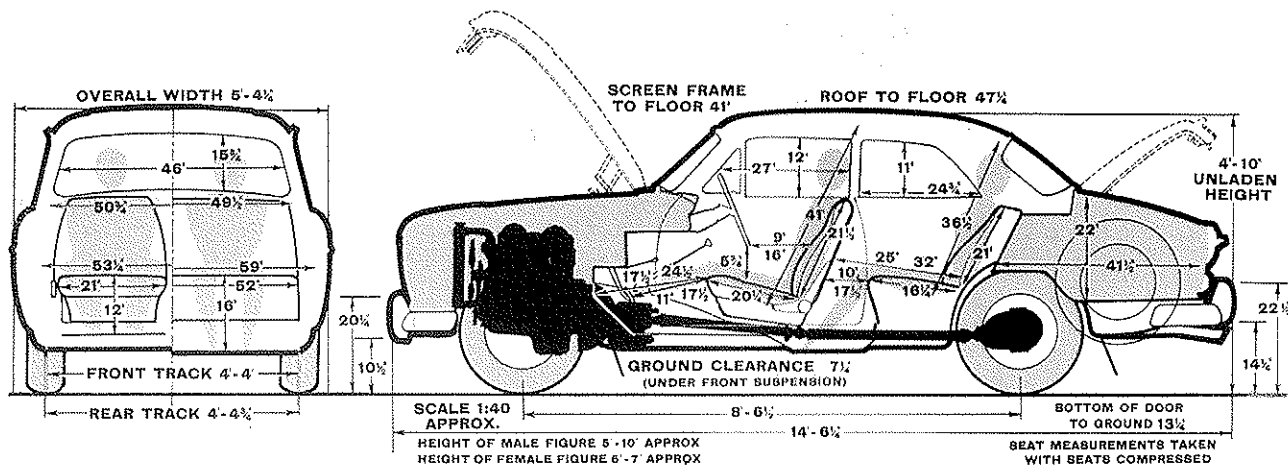
An inevitable consequence of the high-waisted body style is poor visibility of the extremities of the car and of the road close

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1, temperature gauge. 2, ignition warning light. 3, speedometer. 4, trip mileometer. 5, main beam warning light. 6, indicator warning light. 7, total mileometer. 8, oil pressure warning light. 9, fuel gauge. 10, front heater control. 11, windscreen and rear heater control. 12, heater temperature control. 13, heater fan control. 14, indicator/flasher stalk. 15, cigarette lighter. 16, horn ring. 17, choke. 18, ignition/starter lock. 19, lights switch. 20, wiper/washer switch.

Specification



Engine

Cylinders	4
Bore and stroke	84.14 mm. x 80 mm.
Cubic capacity	1,780 c.c.
Valves	pushrod o.h.v.
Compression ratio	8.7:1
Carburettors	Two SU HS6
Fuel pump	AC mechanical
Oil filter	WIX/MANN full flow
Max. power (net)	86 b.h.p. at 5,000 r.p.m.
Max. torque (net)	107 lb. ft. at 3,500 r.p.m.

Transmission

Clutch	Borg and Beck B 1/2 in. s.d.p.
Top gear (s/m)	1:1
3rd gear (s/m)	1.36:1
2nd gear (s/m)	1.99:1
1st gear (s/m)	3.13:1
Reverse	3.25:1
Final drive	4.1:1
M.p.h. at 1,000 r.p.m. in:—	
Top gear	17.6
3rd gear	13.0
2nd gear	8.9
1st gear	5.6

Chassis

Construction	Unitary
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Brakes

Type	Girling—disc front/drum rear, with pressure reducing valve for rear brakes.
Dimensions	10.8 in. dia. discs; 9 in. dia. drums.

Friction areas:

Front	28.7 sq. in. of lining operating on 238.8 sq. in. of disc
Rear	67.1 sq. in. of lining operating on 113 sq. in. of drum

Suspension and steering

Front	Independent by coil springs and unequal length wishbones
Rear	Live axle located by double trailing arms and a Panhard rod, and suspended on coil springs

Shock absorbers:

Front	AC Delco telescopic
Rear	
Steering gear	Gemmer cam and roller
Tyres	165-15 Pirelli Cinturato
Rim size	4J

Coachwork and equipment

Starting handle	No
Jack	Pillar screw type
Jacking points	Two each side under sills
Battery	12-volt negative earth, 60 amp. hour capacity
Number of electrical fuses	4
Indicators	Self-cancelling flashers
Screen wipers	Two-speed electric self-parking
Screen washers	Electric
Sun visors	2
Locks:	
With ignition key	Ignition only
With other key	Doors and boot
Interior heater	Fresh air

Extras

Upholstery	Vinyl
Floor covering	Rubber matting
Alternative body styles	Four-door saloon and estate car

Maintenance

Sump	7 pints S.A.E. 10W-30
Gearbox	1.3 pints S.A.E. 30
Rear axle	2.3 pints S.A.E. 90
Steering gear	Hypoid
Cooling system	14 pints (drain taps two)
Chassis lubrication	None
Minimum service interval	3,000 miles
Ignition timing	21-23° b.t.d.c. at 1,500 r.p.m.
Contact breaker gap	0.016-0.020 in.
Sparking plug gap	0.028-0.031 in.
Sparking plug type	Bosch W175T1
Tappet clearances (hot or cold)	Inlet 0.016-0.018 in., Exhaust 0.016-0.018 in.

Valve timing:

Inlet opens	10° b.t.d.c.
Inlet closes	40° a.b.d.c.
Exhaust opens	38° b.b.d.c.
Exhaust closes	2° a.t.d.c.
Front wheel toe-in	0-0.16 in.
Camber angle	0 to + 1/2°
Castor angle	0 to + 1°
Kingpin inclination	8°
Tyre pressures:	
Front	20 p.s.i. light or heavy load)
Rear	24 p.s.i. (light load); 30 p.s.i. (heavy load)



Substantial-looking boot has little room inside.

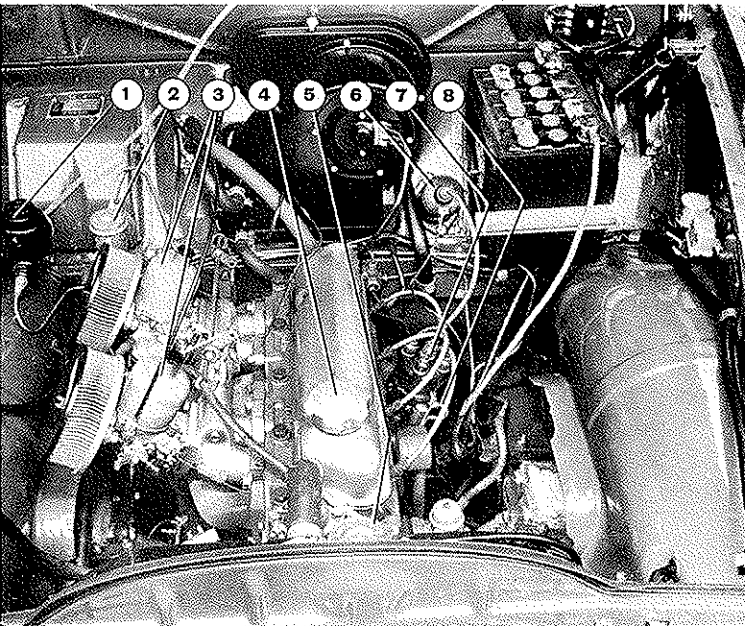
Volvo 132S

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to it, but long range visibility is fair except that the front and rear pillars are rather thick. The anti-dazzle darkening on the mirror is slightly overdone and makes long distance daylight rear vision a little trying when there is rain on the back window. Bright sunlight produced dangerous reflections from the shiny and garish centre piece to the horn ring. A tremendous blaze of light, both on main beam and when dipped, is thrown by the headlamps.

There was no occasion to use the heater during our test, but it produced a furnace-like blast of hot air when tried out, and if it can cope with a Swedish winter it will be able to manage anything British weather can hand out. It is controlled by three levers instead of the more usual two: one for temperature, one for the front seat passengers and one for the windscreen and rear seat passengers. When set to give ventilation during the warm weather of our test the system provided an adequate cooling breeze.

Wind and road noises are low and there is not much transmission noise except for a subdued whine from the rear axle. At moderate speeds engine noise is also low, but above about 70 m.p.h. in top or when accelerating hard, the intake roar becomes obtrusive.



1, brake fluid reservoir. 2, clutch fluid reservoir. 3, carburettors. 4, oil filler cap. 5, radiator filler cap. 6, coil. 7, distributor. 8, dipstick.

MAKE Volvo: MODEL 132S coupe: MAKERS AB Volvo Gothenburg, Sweden: CONCESSIONAIRES Volvo Concessionaires Ltd., 28 Albemarle St., London, W.1.

Fittings and furniture

The dashboard is furnished with fuel and temperature gauges, trip and total mileometers, warning lights for main beam, indicators, oil pressure and charge, and a strip speedometer with a pointed end to its ribbon which introduced doubts into the minds of several of our test staff as to which part was supposed to be indicating the speed.

An ashtray on the fascia and two more on the rear seat armrests provide for smokers, while odds and ends can be stowed in a fascia parcel shelf, on another shelf at the rear, or in the small pockets in the front doors. Due to an irregular shape plus the presence of the spare wheel, boot capacity is poor—only 5.7 cu. ft. of our test boxes could be squeezed into it.

Most of our test staff found the safety belts (front belts supplied as standard) hard to adjust and use. This was partly because the ingenious pistol grip securing clamp needed some sort of "butt" to get hold of. Another standard safety feature of the car is the arch-shaped strengthening member in the roof between the door pillars, designed to give roll-over protection.

Servicing and accessibility

Servicing requirements, at 3,000 mile intervals, are simple and consist mainly of an engine oil change with no need for chassis lubrication. Accessibility is exceptionally good, with the brake and clutch reservoirs, carburettors, coil, distributor dipstick and radiator and oil filler caps all easy to get at. Jacking presented no difficulties once the undersealant had been cleaned from the jacking sockets under the sills.

M

Maintenance chart

- A Engine.** Every 3,000 miles—change oil. Every 6,000 miles—clean oil filler cap, replace oil filter, clean fuel filter, check valve clearance, fanbelt tension, sparking plugs, and compression. Check distributor, ignition timing and carburetter. Every 12,500 miles—change air cleaner element and sparking plugs.
- B Transmission.** Every 3,000 miles—check clutch fluid reservoir, check oil level in gearbox and back axle. Every 6,000 miles—check clutch yoke
- travel. Every 12,500 miles—check propeller shaft. Every 25,000 miles—change gearbox and rear axle oil.
- C Brakes.** Every 3,000 miles—check brake reservoir. Every 6,000 miles—check pads, linings and adjustment.
- D Steering and suspension.** Every 6,000 miles—check front wheel alignment, ball joints and steering rods.
- E Electrical.** Every 6,000 miles—check battery charge and level. Check all bulbs and headlamp alignment.

