

Ruddspeed Volvo 142

Below: Standard exterior except for being lower on its springs. Right: Powerhouse view with twin SU carburetors and pancake air filters

If your motoring takes you into certain of the Southern counties no doubt you will have observed the occasional white Swedish Volvo lying in ambush, on the scent or even in full cry during a chase. These cars have been cooked medium-rare by K. N. Rudd Ltd., of High Street, Worthing, Sussex, but there's nothing to prevent your enjoying the same recipe even if you cannot (legally) taste it to the full in this country.

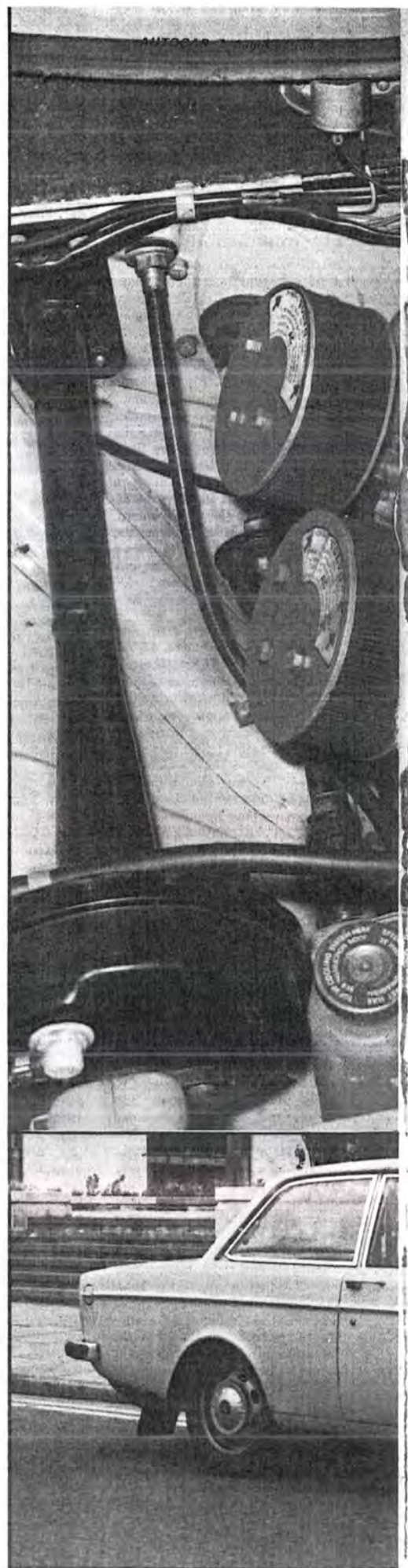
Our test car began as a standard 142—that is, the 2-door saloon with single-carburettor engine developing 87 bhp, and costing £1,465 including tax. The go-faster transformation under the bonnet includes some work on the head to improve gas flow and raise the compression, 0.085in. shaved off the joint face and a thinner gasket bringing this up from 8.7 to 10.8 to 1. A Volvo-made high-lift sports camshaft is fitted, and the inlet manifold carrying the two SU carburetors is, in fact, the type used for the earlier P1800 coupé. The exhaust manifold is also special, by Volvo, but since our test Ruddspeed have developed their own to reduce noise at certain critical speeds. Another later change, with the same object in view, has been the fitting of the S-type's one-piece air cleaner-cum-silencer.

Then the suspension is lowered all round, by chopping one complete coil off each spring and

thereby reducing its free length by about an inch, and stiffened by substituting Koni adjustable dampers for the standard product. Finally, for those who don't like their instruments presented as calibrated slits in a rectangular panel, there is a Ruddspeed trad-style replacement with separate circular dials and including three extras—tachometer (almost indispensable with this tuned engine) and gauges for oil pressure and temperature. Alternatively, an ammeter can be supplied in place of the oil temperature gauge.

On the test car the speedometer gearing was evidently slightly out since the instrument read 4 mph fast at 30, became progressively more accurate to 70-80, then underestimated by 3mph at 100. The fuel level gauge has an undamped needle so that readings are always erratic while the car is moving, and it seems to progress much more quickly over the last indicated half of the tank contents.

Whereas oil pressure and water temperature remained more or less constant even when the car was driven hard, at 50 psi and 80 deg C respectively, oil temperature varied more than usual and approached the 140 deg limit of the calibration during fast cruising; a few flat-out laps round the MIRA banked circuit sent it soaring way 'off the clock'. This is probably accountable by the location of the capsule



PERFORMANCE CHECK

Maximum speeds

Gear	mph		kph		rpm	
	R/T	Rudd-speed	R/T	Rudd-speed	R/T	Rudd-speed
Top (mean)	99	107	159	159	5,680	6,150
(best)	102	110	164	164	5,880	6,300
3rd	80	82	129	132	6,250	6,400
2nd	56	56	90	90	6,400	6,400
1st	36	36	58	58	6,400	6,400

Standing 1/4-mile, R/T: 18.3 sec 71 mph
Ruddspeed: 17.7 sec 78 mph

Standing kilometre R/T: 35.1 sec 87 mph
Ruddspeed: 32.8 sec 94 mph

Acceleration, R/T: 4.1 6.5 9.0 12.9 18.0 24.8 38.7
Ruddspeed: 3.4 5.4 7.4 10.5 14.2 18.3 26.8 40.6

Time in seconds 0

True speed mph 30 40 50 60 70 80 90 100

Indicated speed MPH, R/T: 34 44 54 64 74 85 95 106

Indicated speed MPH, Ruddspeed: 34 43 52 61 70 80 89 97

Speed range, Gear Ratios and Time in seconds

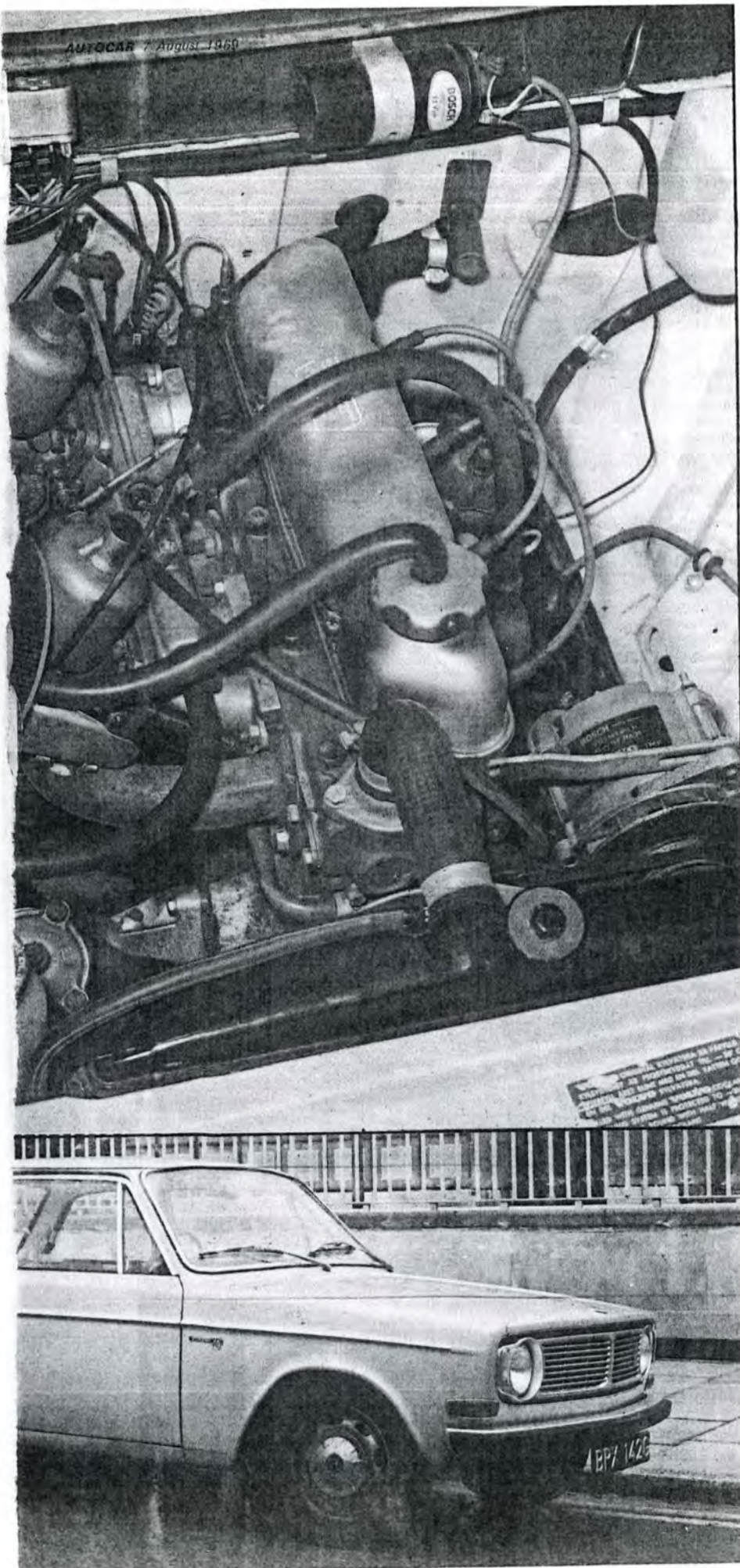
Mph	Top		3rd		2nd		1st	
	R/T	Rudd-speed	R/T	Rudd-speed	R/T	Rudd-speed	R/T	Rudd-speed
10-30	—	—	8.1	—	5.1	4.6	3.2	2.9
20-40	10.7	11.0	6.9	6.6	4.6	4.0	—	—
30-50	9.8	9.7	6.8	6.2	4.9	4.2	—	—
40-60	10.2	9.4	7.2	6.5	—	—	—	—
50-70	11.8	10.8	8.9	7.0	—	—	—	—
60-80	14.4	12.4	11.9	8.4	—	—	—	—
70-90	21.7	15.0	—	—	—	—	—	—

Fuel Consumption

Overall mpg, R/T: 22.3 mpg (12.7 litres/100km)

Ruddspeed: 21.7 mpg (13.0 litres/100km)

NOTE: "R/T" denotes performance figures for Volvo 144S tested in AUTOCAR of 20 February 1969



within the sump, where oil in contact with it would be subject to wide and rapid variations. Even so, an oil cooler would seem a desirable accessory for those contemplating fast journeys on continental motorways.

Our last test of a Ruddspeed Volvo concerned an estate car with the B18 (1800) engine five years ago. Not until two years later were its performance figures almost exactly matched by a 144S with the same engine dimensions. But the 2-litre 144S we tried last February could not do quite so well, and this Ruddspeed 2-litre now shows what can be done with it. The best timed lap on the MIRA circuit represented an average of exactly 106 mph, whereas the 144S could not quite make three figures. To lap at 106 meant touching 109-110 here and there, taking the tachometer to 6,500 rpm. In theory, the true revs at 110 should be nearer six-three.

As the table shows, the tuned car cut the 0-60 time from 12.9 to 10.5 sec, and 90 could be reached almost 12 sec quicker. Although the engine 'gulps' a bit, like a fish out of water, if you give it too much stick at low revs, it begins to really bite around 2,000 rpm, and the benefits of the improved breathing increase progressively above that. Although we regarded 6,500 as the limit, the unit had not 'run out of steam' or become rough even at that point. We covered just short of 1,000 miles, much of it pressing on within the legal limits and including the performance testing, for an overall consumption averaging 21.7 mpg, which compares very reasonably with the 144S at 22.3. Oil consumption was negligible.

Not even its best friend could describe this car as quiet or refined. It is rorty and sporty, with intake roar and tappety noises always there, and when you really put your foot down it sounds and responds like a full-fledged sports model, encouraging you to take it to max revs in every gear. However, as mentioned earlier, the installation should be considerably quieter with the new exhaust manifold and intake silencer.

It is also rather hard work to get the best out of the car over a long distance for, in addition to the normally quite heavy steering and braking, the other controls could well be lighter. The gearchange is rather clumsy (for an excellent box), the clutch on this car seemed to require an abnormal load to free it, and the throttle return springs were so tough that we replaced them with lighter ones as well as doing one or two other surreptitious mods.

Unfortunately we had no opportunity to try out a standard version to draw a direct comparison with the Ruddspeed converted one under identical conditions when assessing the suspension changes. Undoubtedly it rolls less and is considerably stiffer, but our impression was that riding comfort was reduced without much benefit to ultimate cornering ability, and we had reservations also about the handling response after one or two untidy 'moments'. A word about those seat belts; after we had wrestled like Dracula with yards of apparently surplus webbing, and finally wrapped it round us correctly adjusted and with most of the twists removed, we soon abandoned it because of chafing and irritation of the right clavicle. Perhaps this could be because the all-important relationship between road and seat springs has been upset by the suspension change; but that apart, surely Volvo could devise a less complex and more easily applied harness.

This is certainly a car that can cut a fair slice off journey times without overstepping the safety margin, and its generally robust and well-engineered construction add to one's self confidence.

The price for the engine conversion is £142 including fitting, that for the suspension £40 and for the dashboard and instruments £70. □