

AutoTEST

Lada 1500

Latest offering from the Soviet motor industry**High level of interior trim and well equipped for the price.****Detail finish problems, and rather a dated design.****Brake, roadholding, seat comfort and pedal layout reservations.**

"WE SHOULD like to recommend the owner of the car not to make haste in utilizing fully the dynamic qualities of this automobile until he becomes skilled in its driving, and gets familiar with the peculiarities of its behaviour."

Sage advice from the handbook of the latest product of the Soviet automobile industry to reach our shores — the Lada 1500. Based on the Fiat 124 body shell, but powered by a Russian-designed 1,452 c.c. overhead camshaft engine, the car is produced at the gigantic Volzhsky Motor Works at Togliattigrad, a plant set up under a contract with Fiat in 1967. The first car rolled off the lines in 1970 and the plant now produces 12 models, all based on the 124 bodyshell. The 1500 is the latest

car to appear in this country; the Russians are just about to market a 1600 version at home. Estate car versions are, naturally, an important part of the range. It remains to be seen how much effort the Russians will put into further refinement.

Although the sales of Eastern European cars in this country jumped by 42 per cent from 1974 to 1975, the organization selling the cars in this country, Satra Motors Ltd., are far from confident that the sales explosion will be maintained at its current rate. It is known that the Russian masters are uneasy about the rapid growth of the car industry, an industry which has as its principal objective the granting to the people of one of the basic human freedoms, the freedom to

travel. And the producers of the Lada (or Zhiguli as it is known in Russia) have been told that production must increase by only three per cent in the next five-year plan. If the Soviet car exporting agency, Autoexport maintains their current expansion, selling 25 per cent of total production abroad, and if Satra manage, as they hope, to get the Lada into North America, the home market is going to be cut back considerably.

The new car, the Lada 1500, is the top of the range for Lada in Britain. If the Lada 1200 is a Russian version of the Fiat 124, then the 1500 can best be described as a version of the 124S. The main differences in the body construction between the original Italian model and the Russian

version lie in the use of heavier gauge metal for the floor pan, and heavy duty suspension components.

But the Lada 1500 is being marketed here as "A luxury car at an economy price," and it lives up to this claim. From the four-headlamp front to the reversing lights at the rear, the car sets out to sell on its equipment and its price. For £1,798 it offers four doors, cloth upholstery, full carpeting, a laminated screen, heated rear window, rev counter, electric clock, inertia reel belts, servo brakes, safety lamps on the trailing edges of the doors, radial tyres, illuminated bonnet and boot, large glove box and storage shelves. However, underneath all the equipment and the attractive price,

Tough and hard working though the image of the Lada 1500 is, the car carries a lot of bright trim which dates its appearance



Lada 1500

is basically rather an old-fashioned motor car. The design of the 124 is, after all, over 10 years old, and when it came out in 1966, it was described as "very conventional" compared to more advanced Fiat thinking. One can see the appeal of the car in a country where it is judged against the Moskvich and the Volga, but here in Western Europe it has stiffer competition.

The heart of the 1500 is the single overhead camshaft engine, which develops 75 bhp (DIN) at 5,600 rpm, and a healthy 77.5 lb. ft. of torque at 3,500 rpm. The handbook claims that the car will run on three-star petrol, but as we found traces of pinking we switched to four star for the performance testing. However, the very comprehensive driver's handbook shows how to adjust the ignition advance to compensate for poorer grades of petrol; indeed the vernier is referred to in the text as a "manual octane selector". Incidentally, the Russians seem to have a different attitude to knocking to that held in the West. The handbook says that when driving at 30 mph on a level road, a sharp depression of the throttle should produce a slight, quickly vanishing detonation, indicating that the spark advance angle is correct. In case of loud detonation,

or in the absence of detonation, says the book, adjust the ignition. The layout of the engine looks at first to be designed for the do-it-yourself man. The overhead camshaft and finger rocker design means that the valve clearances can be set quickly and easily without the complications of shims, and the filter and fuel pump are very accessible, as are the engine and radiator drain cocks (important for a car that might be left out on the Steppes all night).

However, during our time with the car, it blew the gasket between the exhaust manifold and the down pipes, and this joint, buried as it is below air cleaner and carburettor and close to the bulkhead, proved very difficult to get at.

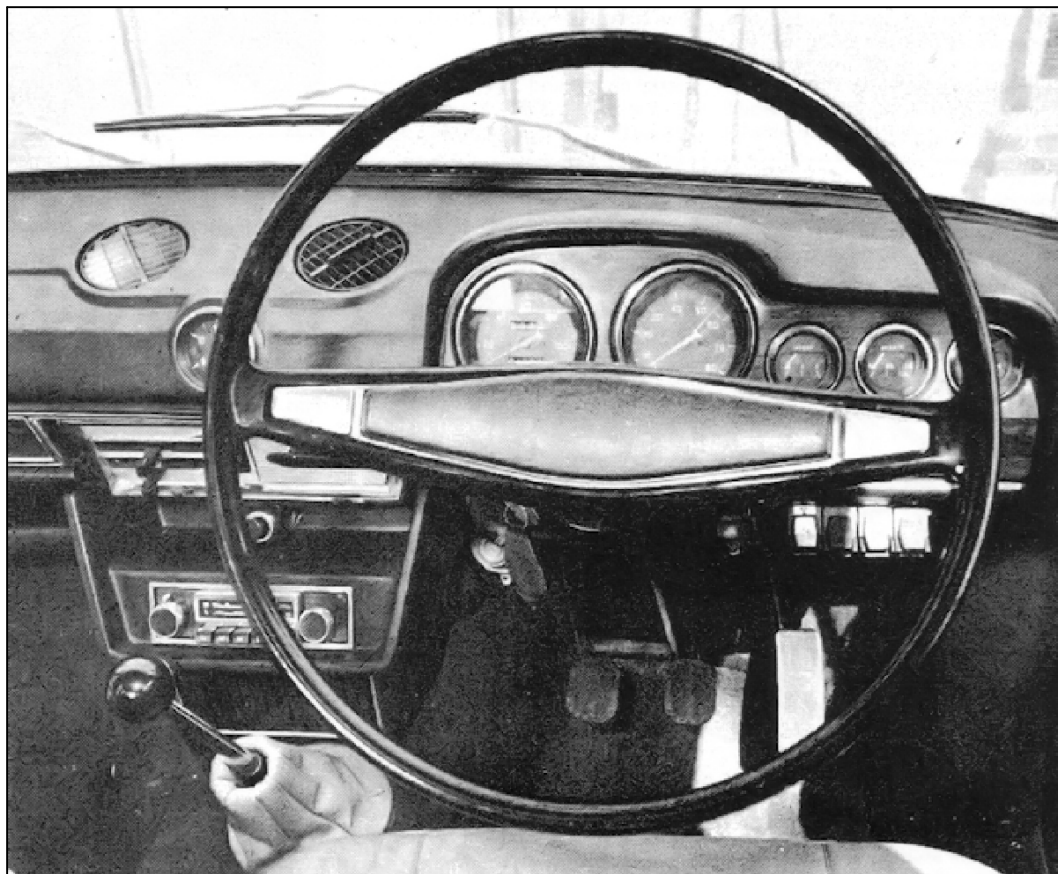
Performance

Cold starting held no problems for the car, though the starter motor on one occasion emitted a raucous shriek as it failed to engage properly in the ring gear, and one wondered how many more times that could happen before serious and expensive damage resulted to both flywheel and starter teeth. As one might expect, the choke was never needed during the test period, the car starting instantly after a couple of prods on the

throttle. Driving away from cold resulted in a couple of noticeable flat spots at around 2,500 and 3,500 rpm, with the higher one being detectable when the engine was warm.

The rev counter is red-lined at 6,000 rpm with a yellow line at 5,500 rpm. However, this engine seems to breathe and rev more freely than did the 1200 we tested last year, and was run up to 7,000 rpm momentarily during our standing start runs. It would be an exaggeration to say that it sounded smooth and happy at this sort of speed, but it certainly did not show signs of any great distress. The 1500 is no slouch, achieving a best maximum speed of 96 mph, and a 0-60 time of 13.8 seconds. Our acceleration runs were hampered by a mysterious intermittent misfire; after dropping the clutch at a standing start the car would run to its maximum revs in first, but then start misfiring badly over 5,000 rpm in second and third, destroying any chance of a reasonable time. The mis-firing was intermittent, and we managed several runs without any trouble at all. The condition was also noticeable on infrequent occasions during press-on cross, country journeys, and we can only surmise it was caused by a form of starvation as fuel surged in

The Lada office - main instruments are rev-counter and speedo, both are easily visible. To the left is the electric clock and on the right a fuel gauge with warning light, temperature and oil pressure. Pedal positions are poor, but most other controls are well placed. Supplementary panels on the right of the wheel controls rear fog warning lamps. Japanese radio on our test car gave disappointing results



Specification

ENGINE	Front, rear drive
Cylinders	4, in line
Main Bearings	5
Cooling	Water
Fan	Electric
Bore, mm (in)	76.0 (2.99)
Stroke, mm (in)	80 (3.15)
Capacity, cc (in)	1,452 (87.1)
Valve gear	ohc
Camshaft Drive	Chain
Compression Ratio	8.8-to-1
Octane rating	97 RM
Carburettor	USSR twin-choke
Max. power	75 bhp (DIN) at 5,600 rpm
Max. torque	77.5 lb ft at 3,500 rpm
TRANSMISSION	
Type	Four-speed, all-synchromesh
Gear Ratio	mph/1000 rpm
4th 1.00	16.8
3rd 1.49	1.28
2nd 2.30	7.3
1st 3.75	4.48
Final drive gear Ratio	Hypoid bevel 4.1 to 1
SUSPENSION	
Front - location	Wishbone
springs	Coil
dampers	Telescopic
anti-roll bar	Yes
Rear - location	Trailing arms & Panhard rod
springs	Coil
dampers	Telescopic
anti-roll bar	Yes
STEERING	
Type	Worm and roller
Power assistance	No
Wheel diameter	15.5 in.
BRAKES	
Front	10 in. dia. disc
Rear	9.8 in. dia. drum
Servo	Vacuum
WHEELS	
Type	Pressed steel disc
Rim width	5 1/2 in.
Tyres - make	Kleber (on test car)
- type	Radial ply
- size	165SR 13
EQUIPMENT	
Battery	12-volt 55Ah
Alternator	40 amp
Headlamps	Halogen 98/80 watts
Reversing lamp	Standard
Hazard warning	Extra
Electric fuses	10
Screen wipers	1-speed, plus intermittent
Screen washer	Foot operated
Interior heater	Water valve
Interior trim	PVC and cloth seats, PVC headlining
Floor Covering	Pile carpet
Jack	Screw pillar
Jacking points	2 each side
Windscreen	Laminated
Underbody protection	Bitumastic & Tectyl
MAINTENANCE	
Fuel tank	8.5 imp. galls (39 ltrs)
Cooling system	16 pints (inc heater)
Engine sump	6.6 pints SAE 20W 50
Gearbox	2.5 pints SAE 90EP
Final drive	2.25 pints SAE 90EP
Grease	None
Valve clearance	Inlet 0.006" cold Exhaust 0.006" cold
Contact breaker	0.019" gap
Ignition timing	10° BTDC (static) 7° BTDC (strobe-scope at 700 rpm)
Spark plug	
- type	Champion N11y
- gap	0.025"
Tyre pressures	F 26; R 28psi (normal driving)
Max. payload	792 lb (360 kg)

Lada 1500

the carburettor float chamber. The strain of runs obviously contributed to the manifold gasket failure; all three nuts had worked loose and one had in fact dropped off. However, the concessionaires tell us that this joint will be given special attention at pre-delivery inspections in the future, and that the trouble is unlikely to recur.

The clutch stood up to the standing start and test hill abuse manfully, spinning the wheels when facing uphill on the 1-in-3 hill without difficulty. However, earlier we had noticed more than a trace of clutch slip when changing up in the gears, and suspected that there was some oil getting through to the clutch faces. The overall gearing is on the low side, the car running at 5,800 rpm, over the yellow warning line, at its maximum speed in top gear, and first was obviously chosen with unmade Russian roads and heavy trailers in mind. At maximum speed the car makes a lot of noise and sounds rather strained, but at 70 mph everything is much quieter and noise levels are quite acceptable.

Ride and handling

At speed the Lada 1500 is quite stable, and although winds were very slight during the time of the test, it felt as though it would be relatively unaffected by side winds. The handling and roadholding were perplexing. At lower normal motoring speeds the car displays safe and consistent understeering characteristics, as one might expect from the conventional layout. The main problem area seems to be with the steering, which is heavy and sticky. Cornering hard tends to be rather untidy, the understeer building up to massive proportions, with the car ploughing wide and the distinct feeling that it is about to trip over its outside front wheel. In fact in this situation one can take one's hands right off the wheel rim, and the car will not self-centre but will hold the lock and continue on round the circle it is describing. The suspension of the car — firmed up for Russian roads — seems to have been rather badly set up, with the result that there is some diagonal rocking on corners, making the driver uneasy. The Lada, in short, does not like to be pushed hard on winding roads, and lets its driver know its dislikes in no uncertain terms.

The ride is acceptable on smooth surfaces, and is in fact good over harsh ones. There was a lot of transmitted bump-thump from the Kleber V12 radials fitted to the test car, but cars on the British market may be fitted with Russian-made radials which could well have different characteristics. The impression is that while the springing is quite firm, the front and rear damping is not evenly



Chunky lines of the Lada 1500 give the advantages of a high roof line reflected in good visibility and good clearance for tall people.

Fancy exhaust trim (below) looks like a rust trap and gives a raucous rattle to the exhaust note. Combined fog and reverse lamps are extras - but the trailing edge warning lamps (bottom) are a nice touch

matched.

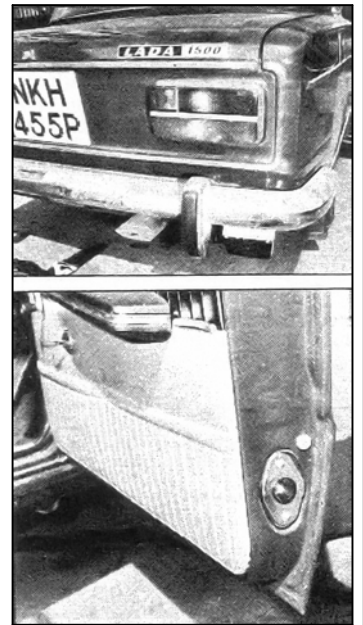
The brakes too were an area where we were not entirely happy with Soviet technical expertise. The Lada 1500 is fitted with a powerful vacuum servo, giving 0.4g retardation at a mere 20 lb pressure on the pedal. The maximum retardation of 1.0g came at only 50 lb. The trouble is that the variation between the two pedal pressures is not a smooth progression, and one can find trouble when first driving the car in trying to differentiate between a smooth gentle stop and standing the vehicle on its nose. One also gets the impression that the braking effort is sometimes not evenly distributed. At MIRA there seemed to be a lack of consistency about which of the four wheels would lock first, and which way the car would slew during stops from 30mph. However, the brakes passed our fade tests well, despite smoking, smelly pads from the fourth stop onwards. The handbrake required a strong pull, but gave an effective, 0.33g stop from 30mph, and held the car easily on the test hills, pointing up

and down.

Fittings and Furniture

The driving position of the Lada betrays its Italian ancestry, being built for the standard, and much quoted Italian (or in this case Russian) ape. When the seat is adjusted so that the pedals are the right distance from the seat, the steering wheel is too far away, apart from being too large and too high. The driver is thus forced to sit very upright. Our heavier testers complained that the seats with their cloth inserts were uncomfortable over long distances, failing to give adequate support in the small of the back.

However, they were of a much better shape and finish than those of the Lada 1200 we tested in January 1975, showing some advances on early Lada production. The general standard of trim and finish was also much improved, the only exception being the inside of the glove locker, where the trim material was of shiny black plastic cloth. The inside of the boot was also notably well trimmed with



neatly finished plastic panels lining the whole of the load space.

The control layout follows the Fiat layout closely, as one might expect, with big twin dials containing rev counter and speedometer right in front of the driver. The speedometer carries trip and total mileage recorders. To the right of the twin dials is a sub-panel containing fuel gauge, water temperature and oil pressure. All three dials carry Cyrillic symbols which might be rather confusing for drivers who cannot read Russian. The fuel gauge tends to stick on full for a hundred miles or more, and then drops rapidly down its scale. It also swings around a great deal on cornering, and the red warning light starts to flush from about half full onwards. There is also a low oil pressure warning light which tends to glow continuously on warm tickover. Under the dials are three rocker switches, controlling wipers, panel lights and side and headlamps, with the headlamp/sidelamp/dip control on a steering column stalk. Under these switches is a rather crude add-on switch panel which controls the rear fog lamps, if these optional items are fitted. The pedal layout is



Engine bay is well laid out, with most items needing routine attention easily accessible. All reservoirs and filler caps are high mounted, and can be checked at a glance.

Maximum Speeds

Gear	mph	kph	rpm
Top (mean)	94	151	5,600
(best)	96	155	5,710
3rd	75	121	6,600
2nd	48	77	6,600
1st	30	48	6,600

Acceleration

True mph	Time Secs	Speedo mph
30	3.8	32
40	6.4	43
50	9.6	53
60	13.8	63
70	19.3	73
80	29.8	83
90	43.5	93

Standing 1/4-mile:

19.4 sec, 70 mph

kilometre:

36.5 sec, 86 mph

mph	Top	3rd	2nd
10-30	-	7.6	4.2
20-40	11.8	6.8	4.4
30-50	11.1	6.9	5.5
40-60	10.9	7.7	-
50-70	13.5	9.8	-
60-80	17.0	-	-
70-90	25.8	-	-

Consumption**Fuel****Overall mpg: 26.8**

(10.6 litres / 100km)

Calculated (DIN) mpg: 23.3

(12.1 litres / 100km)

Constant speed:

mph	mpg
30	33.3
40	30.3
50	29.2
60	28.4
70	25.6
80	21.5
90	17.9

Brakes**Fade (from 70 mph in neutral)****Pedal load for 0.5g stops in lb**

	start/end	start/end
1	20 / 20	6 30 / 30
2	20 / 20	7 30 / 30
3	20 / 25	8 35 / 35
4	25 / 30	9 30 / 30
5	30 / 30	10 30 / 30

Response (from 30mph in neutral)

Load	g	Distance
20lb	0.40	75ft
30lb	0.75	40ft
40lb	0.92	32.8ft
50lb	1.00	30.1ft
Handbrake	0.33	91ft

Max gradient 1 in 3

Clutch

Pedal 30 lb and 6.5 in.

Autocar formula

Hard driving, difficult conditions

24.4 mpg

Average driving, average conditions

29.5 mpg

Gentle driving, easy conditions

34.8 mpg

Grade of fuel: 4-star

(97 RM)

Oil

Consumption (SAE 20 / 50) negligible

Test Conditions

Wind: 0-7 mph

Temperature: 29° C (84 deg F)

Barometer: 29.20 in HG

Humidity: 44 per cent

Surface: dry asphalt and concrete

Test Distance: 650 miles

Figures taken at 3,700 miles by our own staff at the Motor Industry Research Association proving ground at Nuneaton.

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Regular Service**Interval**

Change	3,000	6,000	12,000
Engine oil	Yes	Yes	Yes
Oil filter	Yes	Yes	Yes
Gearbox oil	-	-	-
Spark plugs	-	-	Yes
Air cleaner	-	Yes	Yes
C/breaker	-	-	Yes

Total cost £9.23 £18.011 £27.16

(Assuming labour at £4.30/Hour)

Parts Cost

(including VAT)

Brake pads (2 wheels) - front	£4.48
Brake shoes (2 wheels) - rear	£17.72
Silencers	£11.80
Tyre - each (typical advertised)	£18.79
Windscreen	£39.26
Headlamp unit	£4.32
Front wing	£15.86
Rear bumper	£11.36

Warranty Period

12 months / 12,000 miles

Weight

Kerb, 20.3 cwt / 2,271 lb / 1,030 kg

(Distribution F / R, 54.0 / 46.0)

As tested. 24.0 cwt / 2,690 lb / 1,220 kg

Boot capacity: 22 cu ft**Turning circles:**

Between kerbs

L, 34 ft 6 in; R, 35 ft 0 in

Between walls

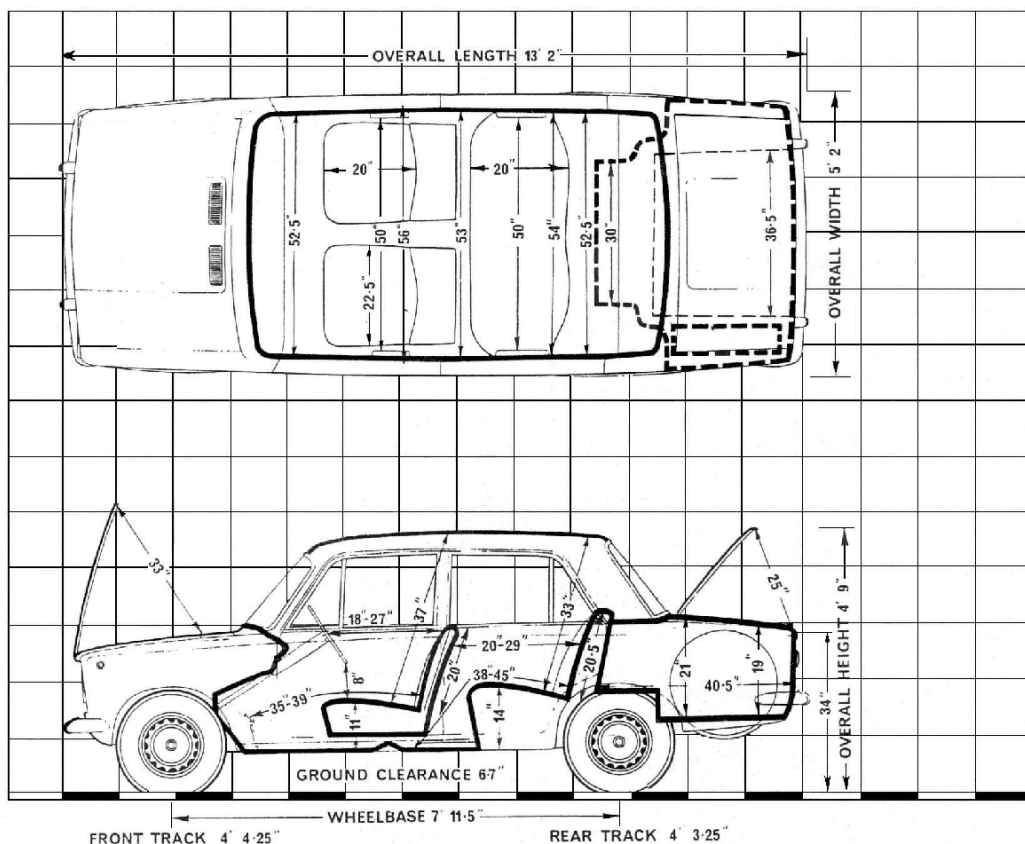
L, 35 ft 8 in; R, 36 ft 4 in

Test Scorecard

(Average of scoring by Autocar Road Test team)

Ratings: 6 Excellent
5 Good
4 Better than average
3 Worse than average
2 Poor
1 Bad

PERFORMANCE	3.33
STEERING AND HANDLING	3.33
BRAKES	3.40
COMFORT IN FRONT	3.58
COMFORT IN REAR	3.71
DRIVERS AIDS	4.00
(instruments, lights, wipers, visibility etc)	
CONTROLS	2.50
NOISE	3.33
STOWAGE	4.00
ROUTINE SERVICE	4.00
(under-bonnet access, dipstick etc)	
EASE OF DRIVING	3.31

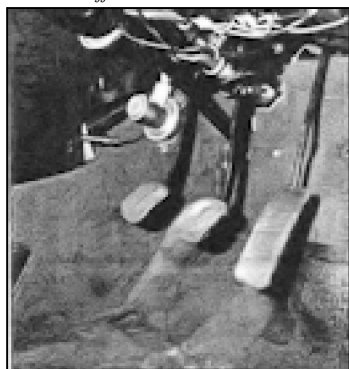
OVERALL RATING 3.51**Comparisons****Car**

	Price £	max mph	0-60 sec	overall mpg	capacity c.c.	power bhp	wheelbase in.	/ length in.	width in.	weight lb.	fuel gall.	tyre size
Lada 1500	1,798	94	13.8	26.8	1,442	75	95 1/2	162	63 1/2	2,271	8 1/2	165-13
Polski-Fiat 125P	1,449	92	15.6	29.0	1,481	85(SAE)	98 1/2	166 1/2	63 1/2	2,283	10	165-13
Morris Marins 1.8 4-door SDL	2,121	95	13.7	29.9	1,798	72	96	169	64 1/2	2,092	11 1/2	155-13
Hillman Hunter S	2,176	92	14.3	24.3	1,725	72	98 1/2	171	63 1/2	2,022	10	155-13
Ford Cortina 1600XL 4-door	2,284	93	15.1	23.7	1,593	72	101 1/2	168	67	2,172	12	165-13
Datsun 140J	2,148	94	15.3	28.9	1,428	85(SAE)	96 1/2	150 1/2	62 1/2	2,181	11	165-13

not too good, with the pedals being a long way off the floor and operating through awkward arcs. The windscreen washer button is mounted high on the toe-board and is rather difficult to find. On our car it also failed to give enough water to the screen to clear the squashed moths of a summer night.

The Lada, with its upright driving position and big windows has excellent vision all round, with few blind spots and all the pillars being acceptably narrow.

Floor mounted washer switch is difficult to operate and was not working properly on our test car. The angle of the pedal rubbers is wrong, and it is difficult to heel-and-toe.



It is fitted with a dipping rear view mirror, which had a degree of distortion on the test car. The carpets are well fitted throughout, but are made from an acrylic loop pile which seemed to shed long fine strands rather too easily. The driver's foot well has a rubberized mat, which smells in hot weather. However, the Russians have succeeded in finding trim and adhesive materials which do not emit the sharp plastic and rubber smells that we complained of so bitterly in the Moskvich. Rear seat legroom is more than adequate, with easy entry from the wide opening rear doors. Seat comfort in the back is good, with a fold-down arm, and arm rests on the inside of the doors. However, the inertia reel is rather unprotected on the bottom of the door pillar, and it would be nice to see a trim box round it to keep out children's toys and sticky sweets.

During the time we had the car there was little need to try the heater, but a quick check seemed to indicate an adequate output to both screen and interior. However, the control is by a water valve, so there will be little sensitivity to degrees of heating. Fresh air ventilation is not particularly good, a stream of air comes from the vents on top of the dash, but although they swivel they do not pitch, and thus are difficult to "focus" in the right position. The blower is very noisy, and does not push air through in anything like enough quantity. However, the quarter vents make up for any deficiencies in face level



Rear seat legroom is good, although the inertia reels are intrusive. The fold down armrest and the armrests on the doors make travel comfortable in the back

ventilation.

We had the car through some of the hottest days of this exceptional summer, and any thoughts of wind noise were lost in the delights of being able to twist the stiff quarter vents right round so that they acted as intake ducts, hauling in great quantities of air to the great relief of the sweating occupants — a well-remembered Fiat 124 feature. The car's airflow through the vents is quite good, but there is nothing to match a good big quarter vent for directing great gouts of air into a car.

The boot is large, although it has

a high lip, and heavy objects lying on the floor are difficult to lift out. However, mention must be made of the traditional Russian tool kit, which always amazes and delights Western drivers. The Lada comes with the standard Fiat-type grey plastic box containing wheel nut brace, plug spanner, screwdriver, and two open-ended spanners. In addition, strapped to the back of the boot, is a large canvas bag which contains tyre pump, tyre levers, starting handle, Allen keys, two more open-ended and two ring spanners, pliers, map reading light, brake bleed tube, inspection lamp on a long lead (which did not work on our car) and a tin of touch-up



As always that excellent Russian toolkit in the fully panelled boot. Pump, inspection lamp, starting handle and tools galore are provided

paint. The Fiat-type jack is stowed by the spare wheel under a fitted cover.

The kit also contains a number of small plastic bags containing spare nuts, bolts and screws, together with lock washers and ordinary washers.

The four headlamps on the Lada give a good spread of light, and very good range, in pleasant contrast to the 1200, and the rear lights, especially the brake lamps, are if anything, too bright, especially for following drivers, particularly since fog warning lights are available for foggy conditions.

Where the Lada fits in

At £1,798, the Lada has few rivals when one remembers it is a full four-door, five-seater saloon, with a high level of trim and equipment. It costs £223 more than the equivalent Lada 1200 ES. A Cortina 1600XL four-door costs £2,284, a Marina four-door SDL £2,121, and a Hill- man Avenger four-door GLS 1600 £2,321. Perhaps the car's strongest rival is the other Eastern European Fiat, the Polski 125P. This is bigger, being based on the 125 bodysheet instead of the 124, but is not so lavishly equipped. However, it is much cheaper, at £1,449, and must offer better value for money than the Lada 1500. It is slower than the Lada, taking 15.6 seconds to 60, instead of 13.8, and has a lower top speed at 92 instead of 95 mph. But these seem small penalties to incur for the saving of £350.

MANUFACTURER:

*Volzhsky Motor Works (VAZ),
Togliatigrad
USSR*

UK CONCESSIONAIRES:

*Satra Motors Ltd.,
Carnaby Industrial Estate,
Bridlington, Yorkshire,
YO15 3QX*

PRICES

Basic	£1,536.80
Special Car Tax	£128.02
VAT	£133.18
Total (in GB)	£1,798.00

Seat Belts	standard
Licence	£40.00
Delivery charge	
(London)	£45.00
Number plates	£7.00
Total on the Road	
Exc insurance)	£1,890.00
Insurance	Group 9

EXTRAS (inc VAT)

* Radio	£38.25
* Combined near fog and reversing lights	£7.86
Vinyl roof	£30.37
<i>* fitted to test car</i>	

TOTAL AS TESTED ON THE ROAD

£1,949.01