

AUTO

TEST

Lada 1200

1,198 c.c.

Soviet-made version of the Fiat 124, with single overhead camshaft engine. Adequate performance and good fuel economy. Ride good, especially on poor surfaces, but handling spoilt by heavy, sticky steering and dead braking. Good tool kit and handbook will make home maintenance very simple.

The Lada is in its element on rough roads like this. Externally, the car is virtually identical to the Fiat 124.

ONE of the great barometers of a nation's industrial and financial health has been the state of its motor industry. With inflation and recession staring the West in the face, things at present are not looking exactly bright. In the Soviet Union, however, the situation is rather different. The rapid rise in oil prices has hardly affected them: inflation, although present, is nothing like as bad as it is here - and there is an insatiable demand for cars.

After the First War, the newly-founded Soviet Union was more concerned in building up heavy industry, rather than producing "inessential" products like cars. A few home-produced cars were made, based mainly on obsolete American designs. The Soviet Union's own home-designed cars have not been exactly out-standing successes. So in the mid-1960s, the Russians turned to the West, to seek assistance. After a lot of hard negotiations, a deal worth £20.7 million was signed between the Russian government and Fiat to build a plant

in Togliatti, on the Volga. and the design which was sold was the Fiat 124, in saloon and estate forms. In the Soviet Union, the car is known as the Shiguli, outside the country, it is the Lada 1200.

To cope with the tougher motoring conditions in the Soviet Union, several alterations were made to the basic 124 construction. A heavier gauge metal is used for the floor pan, and heavy-duty springs and dampers are fitted. Drum rear brakes are substituted for the 124's discs, a larger clutch and stronger starter are fitted (the latter to cope with the very low temperatures encountered in northern parts of the country). This puts the weight of the 1200 saloon up by nearly 200lb, to a kerbside total of 2030lb.

The most major change was the engine. Instead of using the Fiat 1,197 c.c. pushrod unit, the Lada uses a Russian-designed 1,198 c.c. single overhead camshaft engine, with the valves operated by finger rockers. A feature of this layout is that valve clearance

adjustments can be made quickly and easily, without resorting to the complication of shims. This engine is more over-square than the Italian one, with a bore and stroke of 76x66mm, against 73x71.5mm. The DIN power output is 62bhp at 5,600 revs, against the Fiat's 65bhp at the same crankshaft speed. According to the handbook, 93RM octane fuel only is needed, with the 8.8 to 1 compression ratio. However, we found that with 3-star petrol there was a good deal of pinking even under a light load, so we used 4-star, 98RM fuel for the rest of the test.

So how does the Lada line up against the opposition? To start with, it has a major price advantage, at exactly £999, tax paid. This makes it an attractive proposition from the very outset, and something in the region of £300 to £500 cheaper than its UK-made competitors. Unless one notices the Cyrillic lettering on the Fiat-type steering wheel, and on the instruments, one could be forgiven (quite naturally) for thinking that it *is* a Fiat.



AUTO TEST

Lada 1200

Performance

The main contrast is in the performance. Whereas the Fiat engine would rev to a phenomenal 7,000 rpm in the indirect gears, the Lada would reach only a desperate-sounding

6,500 rpm. But nevertheless, the performance is perfectly satisfactory, with 30 mph being reached in 5.2sec, 50 in 12.8sec and 60 in 18.4sec. The gear ratios are identical to those on the 124, evenly spaced, but

rather on the low side. At 6,500 rpm, the maxima in the indirect ratios are 27, 42, and 67 mph, although marks on the speedometer at 32, 37 and 58 mph (roughly equivalent to 5,600 rpm) need never normally be exceeded.

The hydraulically-operated clutch has a smooth, if somewhat heavy and short action, and coped well with a series of

Comparisons

MAXIMUM SPEED MPH

| | | |
|------------------------|----------|----|
| LADA 1200 | (999) | 86 |
| Ford Escort 1300XL | (£1,535) | 86 |
| Hillman Avenger 1300GL | (£1,626) | 85 |
| Morris Marins 1.3 | (£1,546) | 84 |
| Vauxhall Viva DL | (31,530) | 84 |

0-60 MPH, SEC

| | |
|------------------------|-------------|
| Morris Marina 1.3 | 17.3 |
| Ford Escort 1300XL | 17.5 |
| Hillman Avenger 1300GL | 17.6 |
| Vauxhall Viva DL | 18.1 |
| Lada 1200 | 18.4 |

STANDING 1/4-MILE, SEC

| | |
|------------------------|-------------|
| Morris Marina 1.3 | 20.7 |
| Ford Escort 1300XL | 20.8 |
| Hillman Avenger 1300GL | 20.9 |
| Lada 1200 | 21.2 |
| Vauxhall Viva DL | 21.2 |

OVERALL MPG

| | |
|------------------------|-------------|
| Vauxhall Viva DL | 33.2 |
| Morris Marina 1.3 | 28.9 |
| Lada 1200 | 28.3 |
| Hillman Avenger 1300GL | 27.9 |
| Ford Escort 1300XL | 26.7 |

Performance

ACCELERATION

| True speed in mph | Time in Secs | Car Speedo in mph |
|-------------------|--------------|-------------------|
| 30 | 5.2 | 31 |
| 40 | 8.4 | 41 |
| 50 | 12.8 | 51 |
| 60 | 18.4 | 61 |
| 70 | 30.6 | 71 |
| 80 | 54.9 | 82 |

Standing 1/4-mile
21.2 sec mph

Standing Kilometre
40.7 sec mph

mileage recorder:
unable to check (see text)

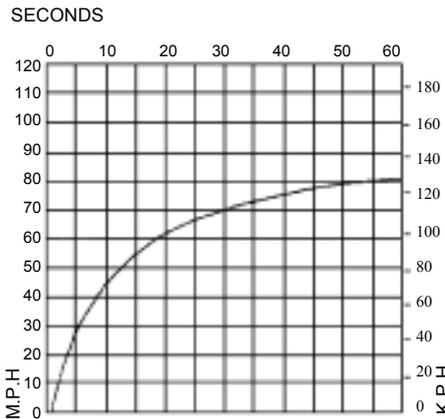
GEAR RATIOS AND TIME IN SEC

| mph | Top | 3rd | 2nd |
|-------|-------|--------|--------|
| | (4.3) | (6.41) | (9.89) |
| 10-30 | - | 8.7 | 5.6 |
| 20-40 | 13.2 | 8.3 | 5.1 |
| 30-50 | 13.6 | 8.8 | - |
| 40-60 | 14.4 | 10.2 | - |
| 50-70 | 22.8 | - | - |

GEARING

(with 155-13in. tyres)

| | |
|-----|-------------------------|
| Top | 15.32 mph per 1,000 rpm |
| 3rd | 10.30 mph per 1,000 rpm |
| 2nd | 6.70 mph per 1,000 rpm |
| 1st | 4.10 mph per 1,000 rpm |



MAXIMUM SPEEDS

| Gear | mph | kph | rpm |
|------------|-----|-----|-------|
| Top (mean) | 85 | 128 | 5.614 |
| (best) | 90 | 145 | 5.875 |
| 3rd | 67 | 108 | 6.500 |
| 2nd | 42 | 69 | 6.500 |
| 1st | 27 | 43 | 6.500 |

BRAKES

FADE (from 70 mph in neutral)
Pedal load for 0.5g stops in lb

| Load | g | Distance |
|------|-------|----------|
| 1 | 55 | 6 65-90 |
| 2 | 65-70 | 7 65-90 |
| 3 | 60-70 | 8 75-100 |
| 4 | 60-80 | 9 65-80 |
| 5 | 65-80 | 10 65-80 |

RESPONSE (from 30 mph in neutral)

| Load | g | Distance |
|---------------|--------|----------|
| 20lb | 0.15 | 201ft |
| 40lb | 0.35 | 86ft |
| 60lb | 0.60 | 60ft |
| 80lb | 0.82 | 36.7ft |
| 100lb | 0.95 | 31.7ft |
| Handbrake | 0.33 | 91ft |
| Max. gradient | 1 in 3 | |

CLUTCH

Pedal 37lb and 4.0in

Consumption

FUEL

(At constant speed - mpg)

| | |
|--------|------|
| 30 mph | 41.2 |
| 40 mph | 40.0 |
| 50 mph | 36.0 |
| 60 mph | 31.5 |
| 70 mph | 28.2 |
| 80 mph | 23.8 |

Typical MPG 32 (8.8 litres/100Km)

Calculated (DIN) mpg 27.3
(10.5 litres/100Km)

Overall MPG 28.3 (10.0 litres/100Km)

Grade of fuel Premium, 4-star
(min 98RM) : see text

OIL

Consumption (SAE 20W50) 2,000 mpp

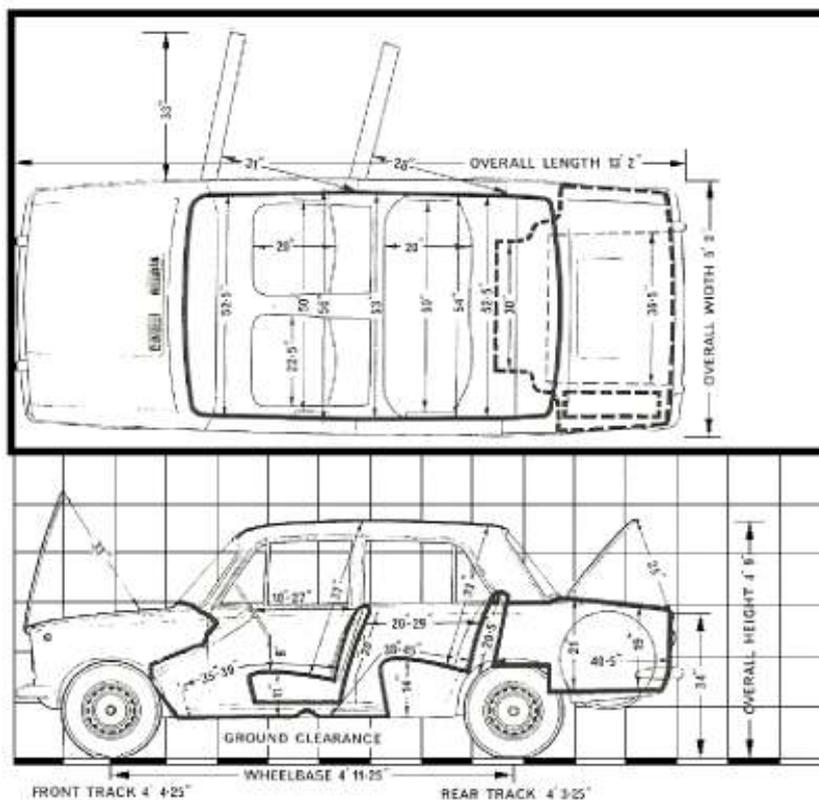
TEST CONDITIONS:

Weather : Dry, overcast
Wind : 8 - 13 mph
Temperature : 10 deg C (50 deg F)
Barometer : 29.00 in. HG
Humidity : 90 per cent
Surface : Dry concrete and asphalt
Test distance 564 miles

Figures taken by our own staff at the Motor Industry Research Association proving ground at Nuneaton

Dimensions

STANDARD GARAGE 16ft x 8ft 6in



TURNING

CIRCLE:
Between Kerbs L, 34ft 6in. R, 35ft 0in.
Between walls L, 35ft 8in; R, 26ft 4in.
Steering wheel turns, lock to lock 3.5

WEIGHT

Kerb weight 18.1cwt (2,030lb - 923kg)
(with oil, water and half full tank).
Distribution ; per cent F, 54; R, 56.
Laden as tested; 22.4cwt (3,510lb - 1,141kg)

vicious standing starts. the car also moved off easily on the 1-in-3 test hill.

On MIRA's banked circuit, the Lada reached a mean maximum speed of 86 mph, with a best one-way leg of 90 mph. At these speeds, the engine sounds very busy, with a lot of churning and thrashing. But at 70 mph motorway cruising, the car is much quieter.

Economy

During the test, the Lada was driven rather harder than usual (this was before the current speed limit restrictions), but the overall figure of 28.3 mpg is nevertheless good. On one trip, which included a mixture of fast cross-country lane driving, motorways, and town work, the figure rose to nearly 30 mpg - and for a fairly

heavy, family four-seater, this is good. No doubt, with adjustment to the ignition (provision is made for it to be done), the car could be made to run on 3-star fuel. The tank holds 8 1/2 gallons, which is rather on the low side. A red warning lamp starts to flash when about 1 1/2 gallons remain. The filler is under a flap on the right-hand

rear wing.

Handling and Braking

The Lada's handling is best described as traditional. The suspension is conventional, with wishbones and coil springs at the front, and a four-link live rear axle, located by a Panhard rod. Unfortunately, the heavy and sticky worm and roller steering rather

Specification

Lada 1200

FRONT ENGINE, REAR-WHEEL DRIVE

ENGINE

| | |
|-------------------|--|
| Cylinders | 4, in line |
| Main Bearings | 5 |
| Cooling system | Water, pump, fan and thermostat |
| Bore | 76.0mm (1.93in.) |
| Stroke | 66.0mm (1.68in.) |
| Displacement | 1,198 c.c. (73 cu. in.) |
| Valve gear | Single overhead chain-driven camshaft, with finger tappets |
| Compression ratio | 8.8 to 1. Min octane rating: 98RM |
| Carburettors | Russian Weber Type D6 |
| Fuel Pump | Mechanical |
| Oil filter | Full flow, renewable cartridge |
| Max power | 62 bhp (DIN) at 5,600 rpm |
| Max torque | 64 lb. ft. (DIN) at 3,400 rpm |

TRANSMISSION

| | |
|-----------------------------|--|
| Clutch | Single dry plate, diaphragm spring, 8.0 in. dia. |
| Gearbox | Four-speed, all-synchromesh |
| Gear ratios | Top 1.0 Third 1.49 Second 2.30 First 3.75 Reverse 3.87 |
| Final drive | Hypoid Bevel. 4.3 to 1 |
| Mph at 1,000rpm in top gear | 15.32 |

CHASSIS and BODY

Construction Integral, with steel body

SUSPENSION

| | |
|-------|--|
| Front | Independent, wishbone, coil springs and telescopic dampers |
| Rear | Live axle, four trailing links, Panhard rod, coil springs and telescopic dampers |

STEERING

| | |
|-----------|-----------------|
| Type | Worm and roller |
| Wheel dia | 15.5in. |

BRAKES

| | |
|---------------|---|
| Make and type | Disc front, drums rear |
| Servo | None |
| Dimensions | F, 10.0in. dia. R, 9.8in. dia. 1.7in. wide shoes |
| Swept area | F, 456 sq. in., R 96 sq.in. Total 252 sq. in. (225sq. in./ton laden) |

WHEELS

| | |
|-------------|---|
| Type | Pressed steel, 4-stud fixing 4.5 in wide rim |
| Tyres -make | Michelin ZX |
| -type | Radial ply tubed |
| -size | 155-13in. |

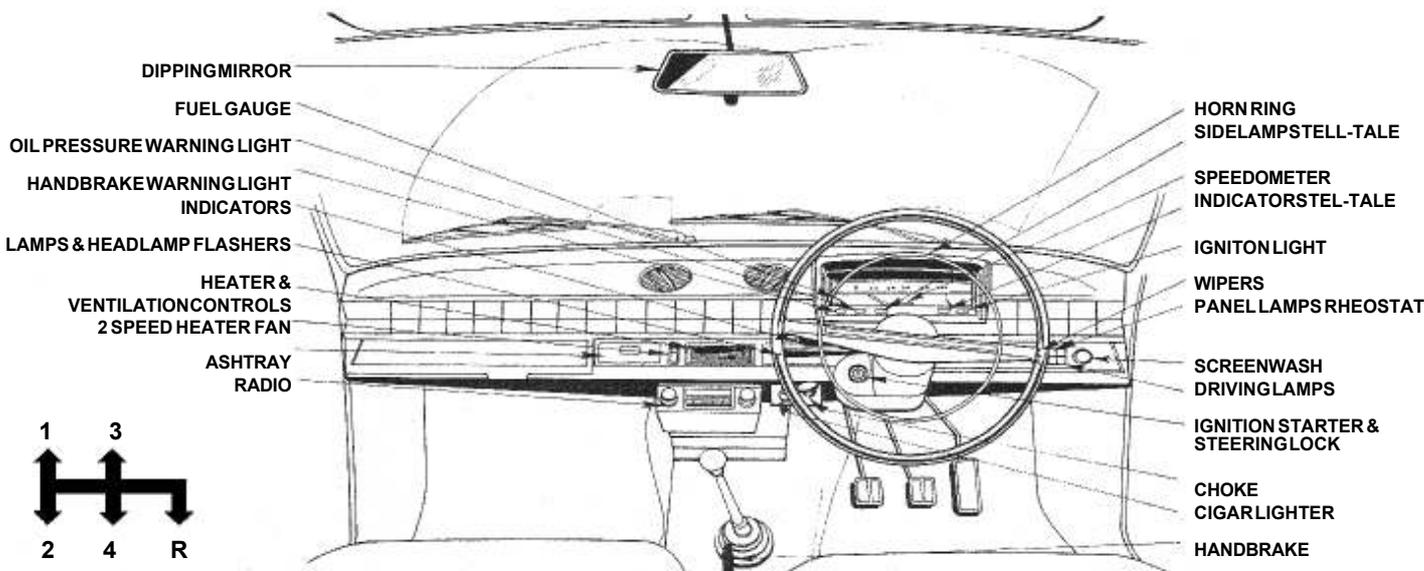
EQUIPMENT

| | |
|----------------|--------------------|
| Battery | 12 Volt 55 Ah. |
| Alternator | 40 amp a.c. |
| Headlamps | 90-80 watt (total) |
| Electric fuses | 10 |

| | |
|----------------------|--------------------------------------|
| Screen wipers | Single speed and intermittent |
| Screen washer | Standard, manual plunger |
| Interior heater | Standard, water valve |
| Heated backlight | Not available |
| Safety belts | Standard |
| Interior trim | pvc seats and headlining |
| Floor Covering | Fitted rubber mats |
| Jack | Screw pillar |
| Jacking points | Two each side, under sills |
| Windscreen | Laminated |
| Underbody protection | Bitumastic treatment whole underside |

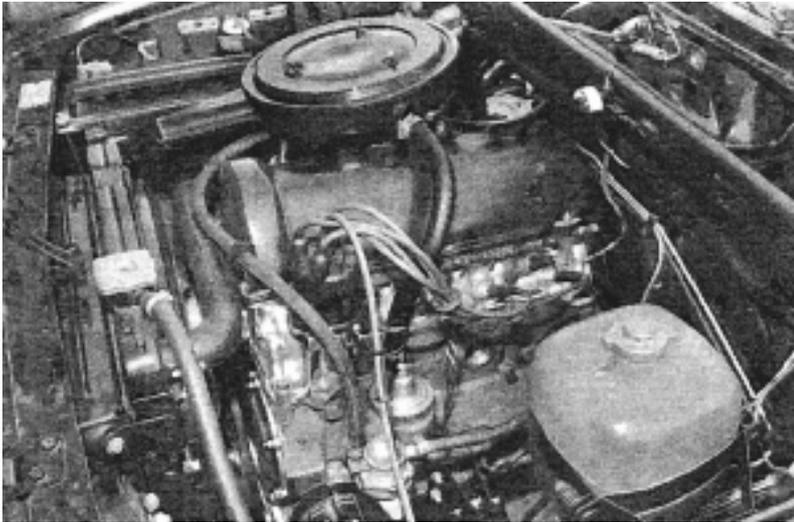
MAINTENANCE

| | |
|------------------|--|
| Fuel tank | 8.5 Imperial gallons (39 litres) |
| Cooling system | 16.5 pints (inc heater) |
| Engine sump | 6.5 pints (3.75 litres) |
| | SAE 20W50. Change oil every 3,000 miles. Change filter every 6,000 miles |
| Gearbox | 4.5 pints. SAE 90EP. Change every 18,000 miles |
| Final drive | 2 pints. SAE 9EP. Change every 18,000 miles |
| Grease | None needed |
| Valve clearances | Inlet 0.006in. (hot) Exhaust 0.006in. (hot) |
| Contact breaker | 0.013-0.016in. gap; 56 ± 3 deg dwell |
| Ignition timing | 5-7 deg BTDC (static) 5-7 BTDC (stroboscope at 1,000 rpm) |
| Spark plug | Type: A75BC or Champion N9Y gap 0.025 in. |
| Tyre pressure | F, 24; R, 26 psi (normal driving) F, 26; R, 26 psi (high speed) F, 24; R, 26 psi (full load) |
| Max payload | 880lb (400kg) |

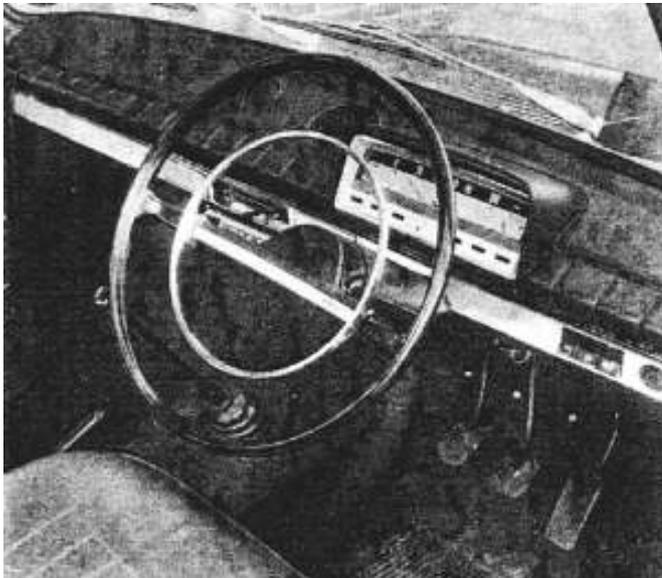


Servicing

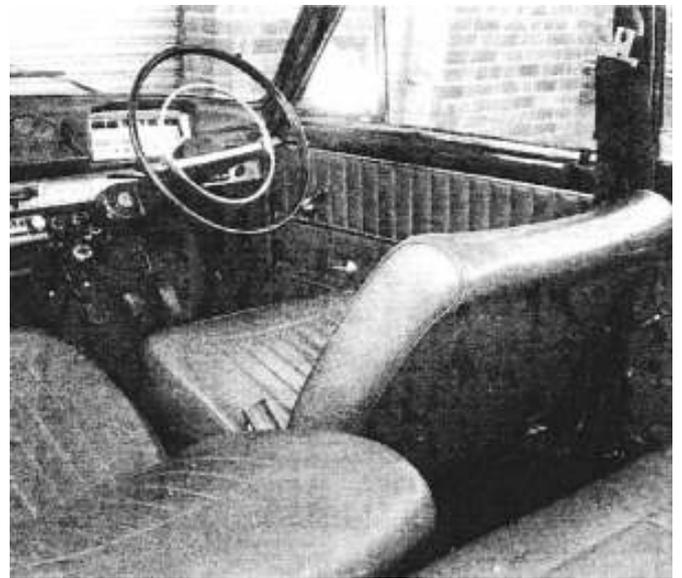
| | 3,000 miles | 6,000 miles | 9,000 miles | Routine replacements: | Time hours | Labour | Spares | TOTAL |
|------------------------|---------------|---------------|---------------|--------------------------------|------------|--------|--------|--------|
| Time allowed (hours) | 2.00 | 3.30 | 4.30 | Brake Pads - Front (2 wheels) | 0.4 | £1.72 | £4.80 | £6.52 |
| Cost at £4.30 per hour | £8.60 | £15.05 | £19.35 | Brake Shoes - Rear (2 wheels) | 1.2 | £5.16 | £9.00 | £14.16 |
| Engine oil | £2.34 | £2.34 | £2.34 | Exhaust system | 2.8 | £12.04 | £18.16 | £30.20 |
| Gearbox oil | - | - | - | Clutch (centre + driven plate) | 3.0 | £12.90 | £4.35 | £17.25 |
| Oil Filter | £1.85 | £1.85 | £1.85 | Dampers - Front (pair) | 1.0 | £4.30 | £15.88 | £20.18 |
| Air Filter | - | - | - | Dampers - Rear (pair) | 1.0 | £4.30 | £11.62 | £15.92 |
| Contact Breaker Points | - | - | £0.91 | Replace Half Shaft | 1.0 | £4.30 | £14.58 | £18.88 |
| Sparkign Plugs | - | - | £1.30 | Replace Alternator | 0.8 | £3.44 | £26.22 | £29.66 |
| Fuel Filter | - | - | - | Replace Starter | 1.0 | £4.30 | £19.33 | £23.63 |
| Total Cost | £12.79 | £19.24 | £25.75 | | | | | |



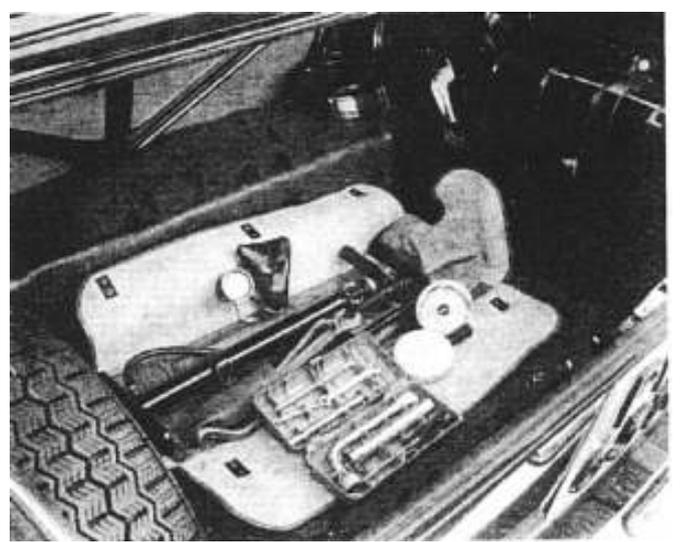
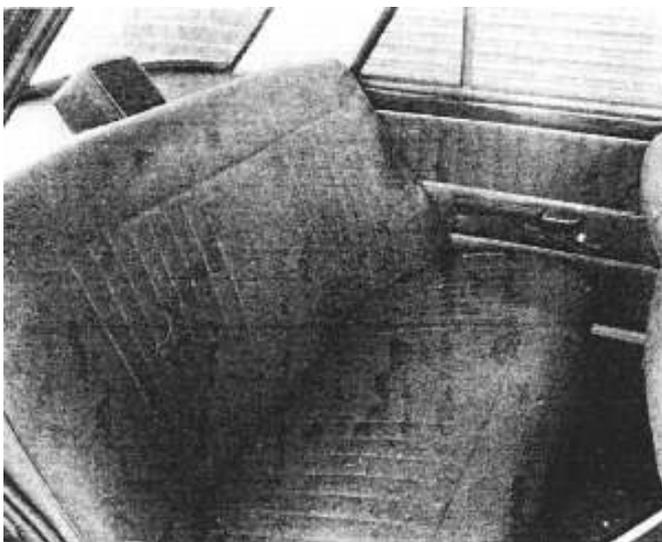
Above left: Access around the single overhead camshaft engine is very good, especially around the oil filter and fuel pump. Above right: A rare sight - the starting handle on the Lada 1200, which makes engine servicing work so easy



Above: The fascia layout is simple and clear. The glove locker, above the front passenger's knees, has a lift-up lid. Below: Rear seat passengers have ample legroom



Above: The front seats are rather flat and lack support. The front quarter vents can be opened. Below: The huge tool kit contains practically everything for the complete service schedule.



AUTO TEST

Lada 1200



There are towing eyes built in beneath the rear bumper, which has deep overriders. The boot is key lock only

self-centring of the front suspension geometry is not sufficiently strong to overcome the stiction in the steering box, so the steering wheel has to be pulled back, rather than coming back of its own accord. This makes fast driving on twisty roads a rather untidy process, without the steering paying off smoothly. Directional stability is fair with the car being pushed about only slightly in strong cross winds.

With its beefed-up suspension, the ride in the Lada is rather firmer than in the Fiat 124. On ordinary smooth roads, the ride is good and well-damped. But we found that the car really came into its own on rough, unmade tracks, where it could cope with almost anything. There was little pitching or roll, and the Lada felt extraordinarily stable. The only weak point was the low positioning of the front number plate, which we managed to bend backwards!

The front disc brakes on the Lada are considerably larger than those on its sister car - 10in. dia. against 8.9in., and a dual-circuit hydraulic system is used. The drum rear brakes, 9.8in. dia., have been used mainly because their linings tend to stand up better to severe conditions of dust and dirt.

While the performance of the brakes is perfectly adequate, their almost totally dead feel could be removed by the fitting of a vacuum servo. This dead feel makes it rather difficult initially to judge stopping distances. Normal check braking - around 0.3g - needed under 40lb pedal pressure, and maximum stopping, at 0.95g, was achieved with just 100lb pedal pressure. The handbrake is effective, holding the car firmly on the test hill. Again, on very rough roads, we found that the pulley guide beneath the central lever is not quite strongly enough protected and was bent, resulting in the rear brakes being locked on. Under our fade tests, the pressure needed for the 0.5g stop from 70 mph rose markedly and then dropped back to a reasonable 65-80lb

Comfort and convenience

It is a pity that having got the rest of the car so near to the standards we have come to expect in the West, the Russians

could not have paid slightly more attention to the front seats. On long trips, one finds that odd aches appear where you have never found them before, and the non-breathing plastic trim can get very sticky after a time. Thigh support is adequate, but lateral support is very poor, with very little wrap-round to support the spine. The backs are also on the low side, leaving the shoulders unsupported. But on the good side, the seat backs have both a fine and coarse adjustment, by means of a handwheel under the front rail. The rear seats, however, are much more comfortable, with the backrests shaped slightly to give support. Legroom in the rear is good.

The fascia is virtually identical to that of the Fiat 124. A single panel ahead of the driver contains the speedometer (2mph fast at 80mph), and a total mileage odometer, without any tenths divisions, which made checking impossible. The speedometer is flanked by the fuel gauge on the left, with the low level warning lamp between the 1/2 full and empty mark, and on the right by the temperature gauge. Ranged across the bottom of the panel are the warning lamps.

A group of three switches on the fascia to the left of the steering column control the driving lamps, panel lamps and screen wipers, with the rubber screen-washer button outboard of them. These switches are identical, and despite their symbols, are confusing in the dark. First click on the wiper switch gives intermittent operation, so useful in drizzle or snow. The second click gives normal full-sweep operation. The driving lamp switch is simply an on-off type, with lamp selection being controlled by the further of the two steering column levers. With the lever pulled back, the headlamps are flashed on

dipped beam only. The other lever controls the direction indicators - and the horn is operated by a sensible full-circle ring.

A parently Fiat saw no reason to change the heating system on the Lada. This is a water-valve type, with two slide controls for temperature and air intake. Distribution is controlled by a large flap under the heater unit, which can only be reached by a foot. Heater output is good, and we have no doubt that it could cope with the harshest of weather conditions. But oddly, there is no heated rear screen available, even as an extra. Russian-made bulbhead lamps are fitted, and they are nothing like as good as British or Continental ones. The light pattern is ragged on dipped beam, and rather vague on main beam.

Living with the Lada

With so few service stations in the Soviet Union, the average motorist there has to be his own mechanic. So as a result, the handbook is more like a workshop manual - and very well translated. It even starts off by telling the new owner how to do his own pre-delivery inspection, and how to de-wax the car. The detail is accurate, and easily understood - there is even a translation panel in the wiring diagram from Russian

to English.

The tool kit is in two parts: the usual grey plastic Fiat-type [but Russian made] box contains small spanners, screwdriver and wheel brace. A much larger bag, strapped to the rear panel in the boot, holds everything from larger ring spanners, tyre pump, pressure gauge and inspection lamp to that rare but so useful device - a starting handle. The jack is strapped into the left-hand rear wing of the boot, over the spare wheel.

Under the bonnet, the engine layout is excellent. The distributor is mounted high up, and the spark plugs are easily reached. The petrol pump has a hand-priming lever, and the cartridge oil filter is at the front of the block, and very easy to get at. An under-bonnet lamp is standard. Electrical circuits are protected by a panel of 10 fuses, located above the driver's right knee.

The major service intervals are at 6,000 miles, with an oil and filter change every 3,000 miles. With the aid of the handbook and the tools supplied, there is absolutely no reason why the average DIY man should not be able to service his Lada in a thoroughly professional manner. Two keys are supplied with the car - one for the ignition and steering lock, and the other for the doors and boot.

In conclusion

We must congratulate the Russians in catching up so quickly (albeit with Italian advice and assistance) with the rest of the world's major motor industry. The Lada 1200 is a thoroughly sound car, let down perhaps by the sticky steering and dead brakes. But these are matters which can be rectified with a minimum of cost. The finish of the car is reasonable, although we noticed one or two small paint runs. Satra have a network of nearly 200 dealers around the UK, so service and spares should present no problem. At a time when motoring costs seem to be going through the roof, this is a car which merits serious consideration. □

MANUFACTURER:

V/O Autoexport, Smolenskaya Pl., 32/34 Moscow G-200, USSR

UK CONCESSIONAIRES:

Satra Motors Ltd, Carnaby Industrial Estate, Bridlington, Yorkshire

PRICES

| | |
|--|-----------------|
| Basic | £853.87 |
| Special Car Tax | £71.13 |
| VAT | £74.00 |
| Total (in GB) | £999.00 |
| Seat belts | Inclusive |
| Licence | £25.00 |
| Delivery charge (London) | £18.50 |
| Number plates | £4.00 |
| Total on the Road (exc Insurance) | £1044.50 |

Insurance

Group 3

TOTAL AS TESTED ON THE ROAD

£1044.50