

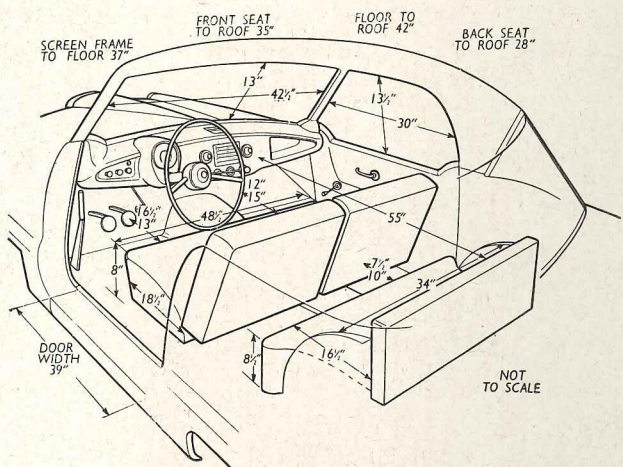
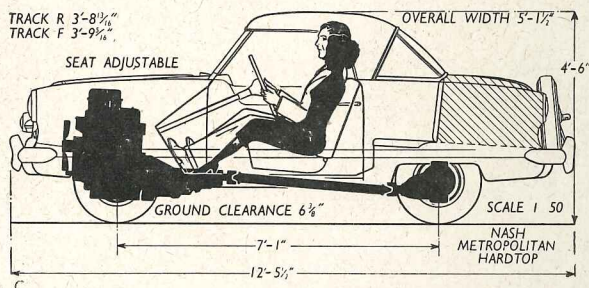


# Road Test No. 25/54

**Make:** Nash

**Type:** Metropolitan "Hard Top"

**Makers:** Built for Nash Kelvinator Division of American Motors Corporation, Detroit, Michigan, by the Austin Motor Co. Ltd., Longbridge, Birmingham. Coachwork by Fisher & Ludlow Ltd., Birmingham



## Test Data

**CONDITIONS.** Mild weather, little wind, continuous heavy rain. Smooth tarred road surface covered in water. Standard grade (non-premium) pump fuel

### INSTRUMENTS

Speedometer at 30 m.p.h. .. .. 14% fast  
 Speedometer at 60 m.p.h. .. .. 14% fast  
 Distance recorder .. .. 7% fast

### MAXIMUM SPEEDS

**Flying Quarter Mile**  
 Mean of Four Opposite Runs .. .. 73.2 m.p.h.  
 Best Time equals .. .. 75.0 m.p.h.  
**Speed in Gears**  
 Max. speed in 2nd gear .. .. 51 m.p.h.  
 Max. speed in 1st gear .. .. 30 m.p.h.

### FUEL CONSUMPTION

40.0 m.p.g. at constant 30 m.p.h.  
 40.5 m.p.g. at constant 40 m.p.h.  
 35.5 m.p.g. at constant 50 m.p.h.  
 29.0 m.p.g. at constant 60 m.p.h.  
 Overall consumption for 625 miles, 20.5 gallons, equals 30.5 m.p.g.  
 Fuel tank capacity 8 gallons.

### ACCELERATION TIMES Through Gears

0-30 m.p.h. .. .. 7.3 sec  
 0-40 m.p.h. .. .. 11.7 sec  
 0-50 m.p.h. .. .. 18.4 sec  
 0-60 m.p.h. .. .. 30.1 sec  
 Standing Quarter Mile .. .. 24.3 sec

### ACCELERATION TIMES on Two Upper Ratios

	Top	2nd
10-30 m.p.h. .. ..	12.3 sec	7.7 sec
20-40 m.p.h. .. ..	12.3 sec	8.2 sec
30-50 m.p.h. .. ..	13.4 sec	11.3 sec
40-60 m.p.h. .. ..	18.4 sec	—

### WEIGHT

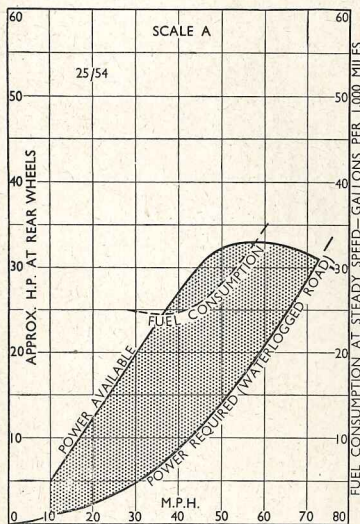
Unladen kerb weight .. .. 17 cwt.  
 Front/rear weight distribution .. 56/44  
 Weight laden as tested .. .. 20 1/2 cwt.

### HILL CLIMBING (at steady speeds)

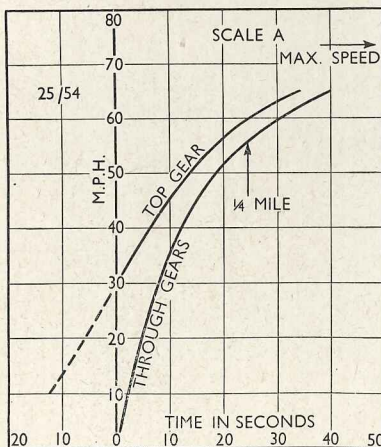
Max. top gear speed on 1 in 20 .. .. 57 m.p.h.  
 Max. top gear speed on 1 in 15 .. .. 51 m.p.h.  
 Max. gradient on top gear .. .. 1 in 10.9 (Tapley 205 lb./ton)  
 Max. gradient on 2nd gear .. .. 1 in 6.8 (Tapley 325 lb./ton)

### BRAKES at 30 m.p.h. (dry road)

0.90g retardation .. (= 33 1/2 ft. stopping distance) with 80 lb. pedal pressure  
 0.85g retardation .. (= 35 1/2 ft. stopping distance) with 75 lb. pedal pressure  
 0.71g retardation .. (= 42 1/2 ft. stopping distance) with 50 lb. pedal pressure  
 0.29g retardation .. (= 104 ft. stopping distance) with 25 lb. pedal pressure



**Drag:** at 10 m.p.h. (very wet road) .. 38 lb  
 Drag at 60 m.p.h. (very wet road) .. 129 lb.  
**Specific Fuel Consumption** when cruising at 80% of maximum speed (i.e., 58.6 m.p.h.) on level road, based on power delivered to rear wheels .. 0.80 pints/b.h.p./hr.

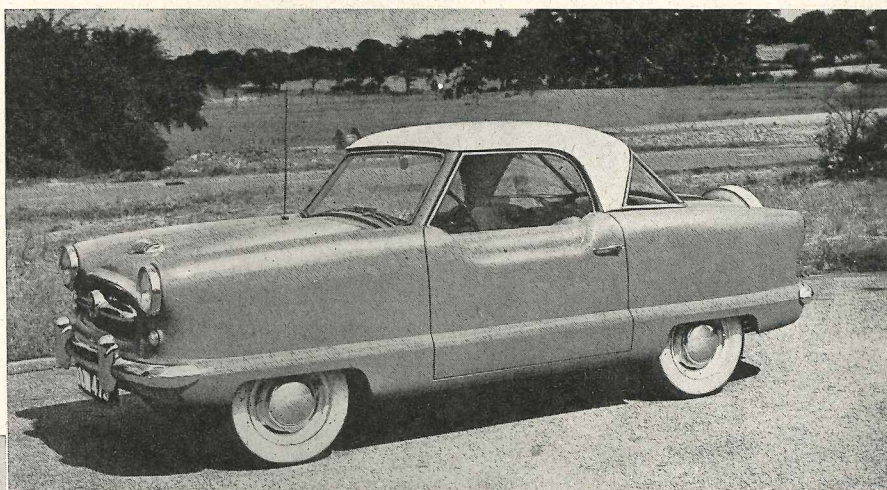


## Maintenance

**Sump:** 7 pints, S.A.E. 30. **Gearbox:** 3 pints, S.A.E. 40. **Rear Axle:** 1 1/2 pints, S.A.E. 90 Hypoid gear oil. **Steering Gear:** S.A.E. 140 gear oil. **Radiator:** 12 1/2 pints (2 drain taps). **Chassis Lubrication:** By grease gun every 1,000 miles to 20 points. **Ignition Timing:** T.D.C. static. **Spark Plug Gap:** 0.017 - 0.019 in. **Contact Breaker Gap:** 0.014-0.016 in. **Valve Timing:** I.O., 5° b.t.d.c.; I.C., 45° a.b.d.c.; E.O. 40° b.b.d.c.; E.C., 10° a.t.d.c. **Tappet Clearances (Cold):** Inlet and Exhaust 0.015 in. **Front Wheel toe-in:** 0 to 1/8 in. **Camber Angle:** 1° negative. **Castor Angle:** 3° **King-pin inclination:** 6 1/2°. **Tyre Pressures:** Front 24 lb. Rear 22 lb. **Brake Fluid:** Girling. **Battery:** 12 volt, 51 amp-hr. **Lamp Bulbs:** 12 volt. **Head Lamps,** "Sealed Beam" units: side lamps/direction indicators and tail/stop lamps, 6/18 watt

# The NASH Metropolitan

UNIQUE in the world of motoring is the Nash Metropolitan, a lively and stylish new small car which, although made entirely in Britain, is American in layout and is intended solely for sale in the North American Continent. Special arrangements made by the Austin Motor Company, manufacturers of this model for the Nash-Kelvinator Division of the American Motors Corporation, have recently allowed us to test on British roads, an example of this "export only" product and, although the majority of our readers will never have an opportunity to purchase a Nash Metropolitan we are convinced that great interest attaches to a most un-



STYLISH and smart in the American manner, the Metropolitan bears a family resemblance to the larger Nash models. A dummy intake decorates the bonnet, and ventilation air slots (some genuine) extend across the scuttle. Note (left) the wide body on a narrow track.

Planned and Marketed in America, but Built in Britain, a New 1.2-litre Car Provides Smooth and Comfortably Brisk Travel for Two People

usual design which is already proving very popular in the new world.

In Europe, there is no mass-produced equivalent to this model, nor can we see any likelihood of there being one. Economic conditions differ hugely on the two sides of the Atlantic Ocean, and in planning a small car for their own home market Nash have done the very opposite of what is usual in Europe: they have concentrated on giving their "baby" the style and road manners of the large cars to which Americans are accustomed, but make no attempt to obtain passenger and luggage carrying capacity comparable with that of larger cars. The Nash Metropolitan is accurately described in a catalogue as "a practical car for small families, a sensible second car for any family," and whereas Europe could only provide a limited demand for this sort of vehicle, the United States of America provides a big enough

market to justify tooling-up the design for large-scale, low-cost manufacture. To a European motorist, unfamiliar proportions make it difficult even to get a correct impression of the size of the Metropolitan. The wheelbase of 7 ft. 1 in. and the track of 3 ft. 9½ in. are smaller than the corresponding dimensions of many cars which are familiar under the old "8 h.p." designation. On the other hand, an internal width across the front seat of just over 4 ft., an overall length of 12 ft. 5½ in., an overall width of 5 ft. 1½ in., and an engine displacement of 1,200 c.c. suggest something considerably larger. The unusual proportions of this car (unusual in Europe, that is to say) are indicated by the fact that the internal width of the body very substantially exceeds the wheel track, there being considerable overhang which has been fully used in providing elbow room inside the car.

In Europe, however, any mass-produced car of more than 600 c.c. engine size is designed to provide at least tolerably comfortable accommodation for four adults, whereas the Metropolitan aims at providing a higher standard of roominess for two people only plus accommodation for two small children in a very tiny rear compartment. In Europe, this does not seem an especially compact car when parking problems in a congested town have to be faced, whereas in America it is in the very advantageous position of being 22½% shorter and 18% narrower than the "average" car. In the land where it is made, this model seems to have a good performance and reasonable fuel economy, whereas in the land of its conception it will in contrast rate as an adequate performer with very low running costs. The differences in national standards of judgment,

which are highlighted by this product of international co-operation, are so great as to make it almost surprising that any European-type cars at all can be sold in America—and vice versa that there is any demand for American-type cars in Europe!

## Through British Eyes

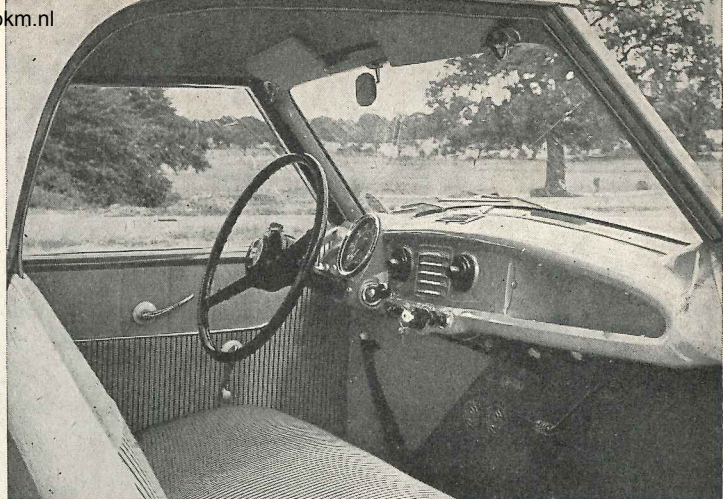
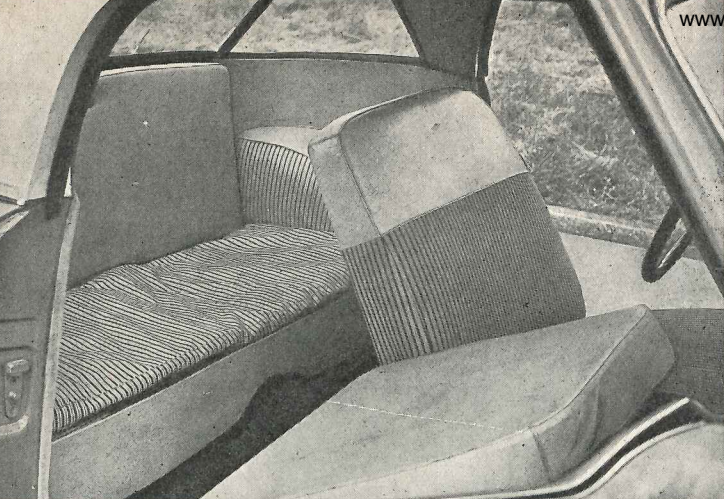
After this lengthy preamble, endeavouring to place the Nash in its correct perspective, it will be more helpful for our readers on each side of the Atlantic Ocean if we abandon any further attempt to view the Nash Metropolitan in a remote and "international" manner. This car is built entirely in Britain, with suitably adapted Austin mechanical components assembled at the Austin factory into a composite body-chassis structure produced by Fisher and Ludlow, Ltd. It has been tested on British roads, running on British fuel, by British-born drivers carrying British passengers, and from this point onwards it is described and assessed by strictly insular standards.

Unusual in appearance, and conspicuous in a pink-and-cream colour scheme, the Nash Metropolitan submitted for test was too flamboyant looking to please everyone, but a substantial proportion of those who saw it in town and country surroundings were favourably impressed. Internally, the finish is rather less ornate, and accordingly meets with wider approval, the neat fascia panel being formed from a single steel pressing painted to match the car. A large speedometer with a clear, circular dial faces the driver directly, the centre of the panel is occupied by a radio receiver, and there is a shallow cubbyhole in front of the passenger. The general quality of paintwork, plating and fit of components on the example submitted for test appeared quite high despite this model's moderate price.

## In Brief

Price in U.S.A., \$1,445 at ports of entry (equivalent at £1 = \$2.80, £516)

Capacity	...	...	...	1,200 c.c.
Unladen kerb weight	...	...	...	17 cwt.
Fuel consumption	...	...	...	30.5 m.p.g.
Maximum speed	...	...	...	73.2 m.p.h.
Maximum speed on 1 in 20 gradient	...	...	...	57 m.p.h.
Maximum top gear gradient	...	...	...	1 in 10.9
Acceleration:				
10-30 m.p.h. in top	...	...	...	12.3 secs.
0-50 m.p.h. through gears	...	...	...	18.4 secs.
Gearing: 14.0 m.p.h. in top at 1,000 r.p.m.;				
60 m.p.h. at 2,500 ft. per min. piston speed.				



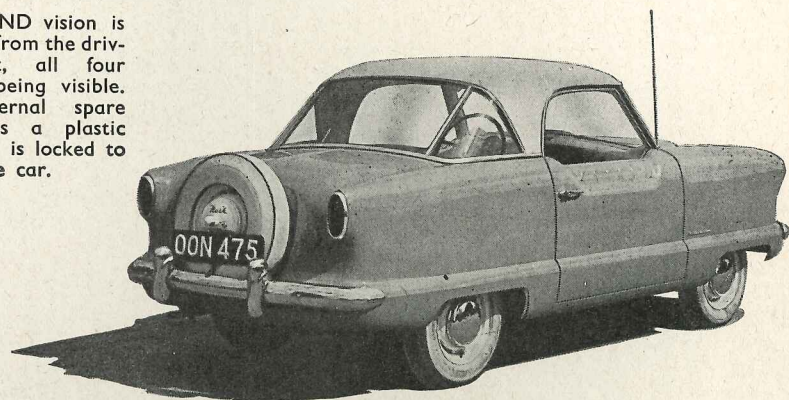
**SPEEDOMETER**, radio controls and switches fit neatly into the fascia pressing; the handbrake, though effective, is rather awkward to reach. Divided squabs of the wide front seat tilt forward to give access to the small rear bench whose back-rest forms a lockable door to the boot.

Two wide doors with press-button exterior handles are hinged at their forward edges, spring detents holding them secure when they are wide open. Entry is reasonably easy, although one is apt accidentally to rub muddy shoes against the (washable plastic) trim of the doors, and the bench-type seat has a divided back-rest, either half of which can be hinged forward separately to give access to the back of the car. Internal width approaches that required for three-abreast seating, so that when a short driver has adjusted the seat well forwards, a taller passenger can still find comfortable leg-room by sitting diagonally. Smoother fore-and-aft sliding of the seat would be a welcome improvement.

#### Children and Luggage

Behind the driver and passenger, a bench seat which can accommodate two young children is provided, the acutely limited dimension being headroom, of which there is only about 28 in. below the sharply sloped rear window. The convertible model, which is an alternative to the "hard top" submitted for test, could, when used with the roof folded, probably accommodate a single adult sitting sideways in the rear compartment, but in the "hard top" this is barely practicable. The rear seat cushion is quickly removable, and the rear seat back-rest may be unlocked (by a different key from that used for the ignition and the car door) and folded down flat, when the rear compartment and the usefully large luggage locker join up to provide accommodation for a huge amount of baggage. No external access to the luggage locker is provided, and although access to luggage from inside the car has recently been proved very acceptable on a four-door saloon with folding rear seats, it re-

**ALL-ROUND** vision is excellent from the driving seat, all four "wings" being visible. The external spare wheel has a plastic cover and is locked to the car.



mains a most inconvenient arrangement on a two-door model such as this.

Somewhat low, the bench-type driving seat would be more comfortable for all-day journeys if it were more thickly upholstered. Forward vision through the large windscreen of flat laminated safety glass is quite good, however, over a bonnet which is flanked by high wings, although a driver of modest stature may find the top of the steering wheel coming into his line of vision. The wrap-around rear window provides even better rearward vision so that, in fact, all four wings are visible from the driving seat! The driving position is on the whole quite comfortable, although the gear lever can contact the knee of a tall driver, and the spacing between the pedals is surprisingly small in relation to the amount of unused width available alongside them.

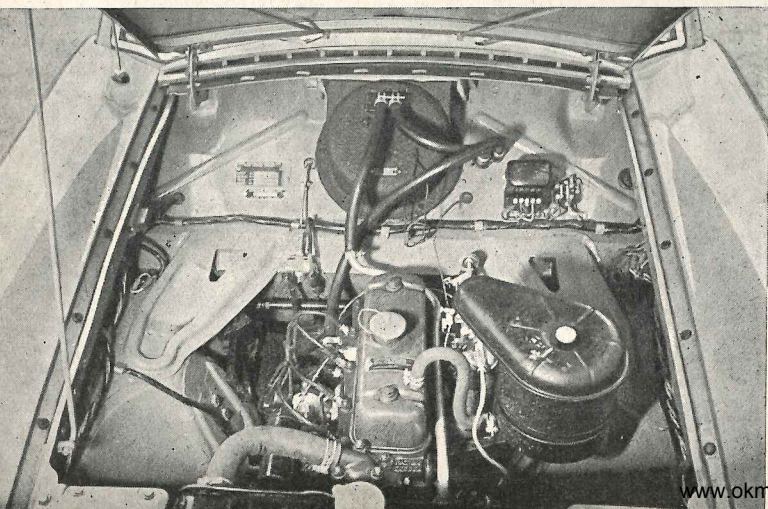
Instant engine starting from cold was always secured with the test car, either by using the choke in normal fashion or by priming the engine via a few strokes of the throttle-actuated accelerating pump, and

warming up is reasonably quick in cool summer weather. Throughout our test, incidentally, standard-grade petrol was used, and the engine was free from pinking except on certain brands of fuel which seemed less suited than others to its tastes. At its normal running temperatures, this car shows as high a standard of top-gear flexibility as can possibly be expected of an engine with only four cylinders, it being possible to take a corner at less than 10 m.p.h. and then to accelerate smoothly up an appreciable gradient in top gear.

Only three speeds are provided, controlled by a lever which emerges neatly from the fascia panel beside the steering column. Synchromesh engagement works effectively on top gear and on the quiet but not altogether inaudible second ratio, the almost equally quiet first ratio being unsynchronized but very easy to engage at low speeds. The gear-lever movement is rather long, but light and smooth, and although this is emphatically not to be regarded as a sports car, the speeds of 25 m.p.h. and over 40 m.p.h. which may habitually be reached in the indirect gears are reasonably high. Smooth to engage, the clutch seems willing to tolerate starts from rest in second gear.

#### Top Gear Performance

Smooth but quite brisk acceleration is provided in top gear from 10 m.p.h. up to about 55 m.p.h., beyond which it diminishes rather rapidly. Good acceleration comes from the commendable ratio of engine size to car weight, and not from unduly low gearing, so that 60-65 m.p.h. is a happy cruising gait. No undue amount of wind noise is evident provided the windows are kept shut, nor do body panels drum except



**A VERY WIDE** engine bay makes access to essential parts quite simple. On the scuttle bulkhead behind the o.h.v. Austin engine is the heating unit.

## The Nash Metropolitan Contd.

to a slight extent at absolute maximum speed, but a full 10 m.p.h. of speedometer optimism does add to the impression of fast travel! Our tests were run under unfavourable conditions of low barometric pressure, heavy rain, and waterlogged road surface, despite which a maximum speed of over 73 m.p.h. was timed as the average of two-way runs.

Fuel economy did not quite come up to the standard which we had hoped to see from this commendably light vehicle, although the overall figure after correcting for instrument error was better than 30 m.p.g. When handed over for test the car had run just 3,000 miles, its oil consumption being possibly a pint per 1,000 miles, and further running might improve both m.p.h. and m.p.g. figures. With a petrol tank holding almost nine gallons there is, in any case, a very useful range between refuelling stops.

Riding and handling characteristics on this model are not by any means easy to describe. On smooth roads, there is only the soft movement associated with much larger cars, but bigger bumps are both heard and felt to an unexpected extent. Going into corners, the car feels as if it is

forward rather a long way when using it

Probably a majority of purchasers will use this car in towns and cities, and in London it was an excellent run-about, but we also sampled it on (and off) country roads. The forward concentration of weight and the use of ribbed tyre treads do not help wheel grip on muddy tracks, but the wheels are slotted to permit the fitting of snow-grips, and there is very generous clearance beneath the nose and tail of the bodywork. On muddy going, the fully enveloping coachwork proved to keep itself quite exceptionally clean.

Two optional items of extra equipment which have been developed in Britain to Nash requirements are the radio and the fresh-air heating system. The radio has manual tuning only, and covers only the medium waveband, but is a powerful station-getter with unexpectedly good tone, the serious fault being a rather high-g geared tuning control which is really too sensitive for safe use whilst driving. The heating system has an adjustable thermostat to control the water flow, and it appears powerful, although we had hoped to find it easier to set it to provide merely that slight trace of extra warmth which can be

**DIMENSION** figures cannot convey the true impression of the Metropolitan's size, but comparison with a six-foot man shows how small the car really is.



going to roll a great deal, but then checks itself, the initial and final lurch into and out of a fast curve or swerve remaining rather irritating. The Nash can nevertheless be cornered quite as fast as other small cars, on both wet and dry roads. The steering is extremely light at all times, with little reaction from or feel of the road—normally there is self-centring action, but during fast negotiation of an acute corner this can disappear. Unusually large amounts of wheel movement are needed to steer into a corner, despite which the car can be placed with precision once a driver is accustomed to the Metropolitan's differing dimensions of wheel track and overall width. The turning circle proved to be disappointingly large in diameter.

As delivered to us, the front brakes were adjusted so closely as to bind, and the consequent overheating may have affected their subsequent performance. Quite light pressure on the rather high pedal would lock all four wheels, the car tending sometimes to pull sideways to some extent, and overheating proved to produce merely fierceness rather than fade of the brakes. The vertical handbrake lever is neat and effective, but a driver must reach

welcome late on a summer evening. Ventilation otherwise is by wind-down windows which disappear completely into the smooth-topped doors, and after having learned to avoid degrees of window opening intermediate between one inch and half-open, it becomes possible to obtain very varied degrees of ventilation without serious draughts. Entirely unsuited to British town driving and parking habits is a bright "interior" light below the fascia panel which is alight whenever the sidelamps only are switched on and goes out again only when the headlamps are in use.

In effect, the Nash Metropolitan provides rather more comfort and carrying capacity than do most small sports cars, and rather more effortless performance than do most small touring cars, together with reasonable but not brilliant riding and handling qualities and contemporary American coachwork styling. With its very marked American accent, this car understandably attracts purchasers in the country for which it was designed; just as understandable is the fact that in Britain and many other parts of the world the greater demand is for small cars with quite different characteristics.

## Mechanical Specification

<b>Engine</b>	
Cylinders ... ..	4
Bore ... ..	65.48 mm.
Stroke ... ..	89 mm.
Cubic capacity ... ..	1,200 c.c.
Piston area ... ..	20.88 sq. in.
Valves ... ..	Pushrod o.h.v.
Compression ratio ... ..	7.2/1
Max. power ... ..	42 b.h.p. at 4,500 r.p.m.
Piston speed at max. b.h.p.	2,625 ft. per min.
Carburettor ... ..	Zenith 30VIG8 downdraught
Ignition ... ..	12-volt coil
Sparkling plugs ... ..	Champion N8B, 14 mm.
Fuel pump ... ..	AC mechanical
Oil filter ... ..	Optional extra by-pass type
<b>Transmission</b>	
Clutch ... ..	Borg & Beck single dry plate
Top gear (s/m) ... ..	4.625
2nd gear (s/m) ... ..	7.1
1st gear ... ..	11.27
Propeller shaft ... ..	Hardy Spicer, open
Final drive ... ..	Hypoid bevel
Top gear m.p.h. at 1,000 r.p.m.	14.0
Top gear m.p.h. at 1,000 ft./min. piston speed ... ..	24.0
<b>Chassis</b>	
Brakes ... ..	Girling hydraulic (2 Ls front)
Brake drum diameter ... ..	8 in.
Friction lining area ... ..	77 sq. in.
Suspension:	
Front ... ..	Coil and wishbone I.F.S.
Rear ... ..	Semi-elliptic
Shock absorbers ... ..	Girling telescopic
Tyres ... ..	5.20-13 Goodyear
<b>Steering</b>	
Steering gear ... ..	Cam gears
Turning circle ... ..	37 ft. (L. & R.)
Turns of steering wheel, lock to lock	2½
<b>Performance factors (at laden weight as tested)</b>	
Piston area, sq. in. per ton ... ..	20.4
Brake lining area, sq. in. per ton	75
Specific displacement, litres per ton mile	2,510
Fully described in <i>The Motor</i> , March 24, 1954	

## Coachwork and Equipment

<b>Bumper height with car unladen:</b>	
Front (max.) 25 in., (min.) 15 in.	
Rear (max.) 23 in., (min.) 13 in.	
Starting handle ... ..	No
Battery mounting ... ..	Under rear seat
Jack ... ..	Operated by wheel brace
Jacking points ... ..	Two external on sides of body
Standard tool kit: Jack, combined wheel brace and starting handle.	
Exterior lights: Two headlamps, two side-lamps/direction indicators, two stop/tail/direction indicator lamps, number plate lamp.	
Direction indicators: Flashing type, self-cancelling	
Windscreen wipers ... ..	Two-blade electrical, non self-parking.
Sun visors ... ..	Two, universally pivoted
Instruments: Speedometer (with odometer but no decimals or trip distance recorder), fuel contents gauge.	
Warning lights: Oil pressure, dynamo charge, headlamp main beam, direction indicators.	
Locks:	
With ignition key... ..	Ignition, passenger's door.
With other keys ... ..	Internal luggage locker, spare wheel.
Glove lockers ... ..	One on fascia panel
Map pockets ... ..	None
Parcel shelves ... ..	None
Ashtrays ... ..	One on fascia panel
Cigar lighters ... ..	One on fascia panel
Interior lights ... ..	One below fascia panel
Interior heater: Fresh air type with windscreen de-misting (optional extra).	
Car radio ... ..	Pye (optional extra)
Extras available: Thermostat-controlled interior heater, car radio, white-wall tyres, by-pass oil filter.	
Upholstery material: Combined leather and woven plastic.	
Floor covering ... ..	Rubber (with felt beneath)
Exterior colours standardised: Croton green, spruce green, canyon red, Caribbean blue, all with pearl grey roof.	
Alternative body styles ... ..	Convertible coupe