

GIANT ROAD TEST

HILLMAN SUPER MINX

saloon
convertible
station wagon



THE SUPER MINX HAS AN odd place in the British market. Its engine size puts it in the ever-popular medium category among people who think of 2½ litres as big, yet an unusual structural solidity combined with what the trade calls a complete specification jacks its price up out of the usual range. In fact it fights against one of the walnut-encrusted products of the Group's own badge-engineers, the ageing Singer Gazelle, as well as Standard-Triumph's equally drawing-room Vitesse 6. Accordingly it must get its sales on deep-down worth rather than surface appeal.

An uncommonly solid and heavy and apparently very rigid steel monocoque structure makes a fine basis. Rootes has been building integral body-chassis units for a long time and this one, more than most in our experience, shows the benefit of careful and progressive development. All three basic body styles use the same steel pan and the same box structure and sub-frame forward of the scuttle. The

small car



photography CHARLES POCKLINGTON



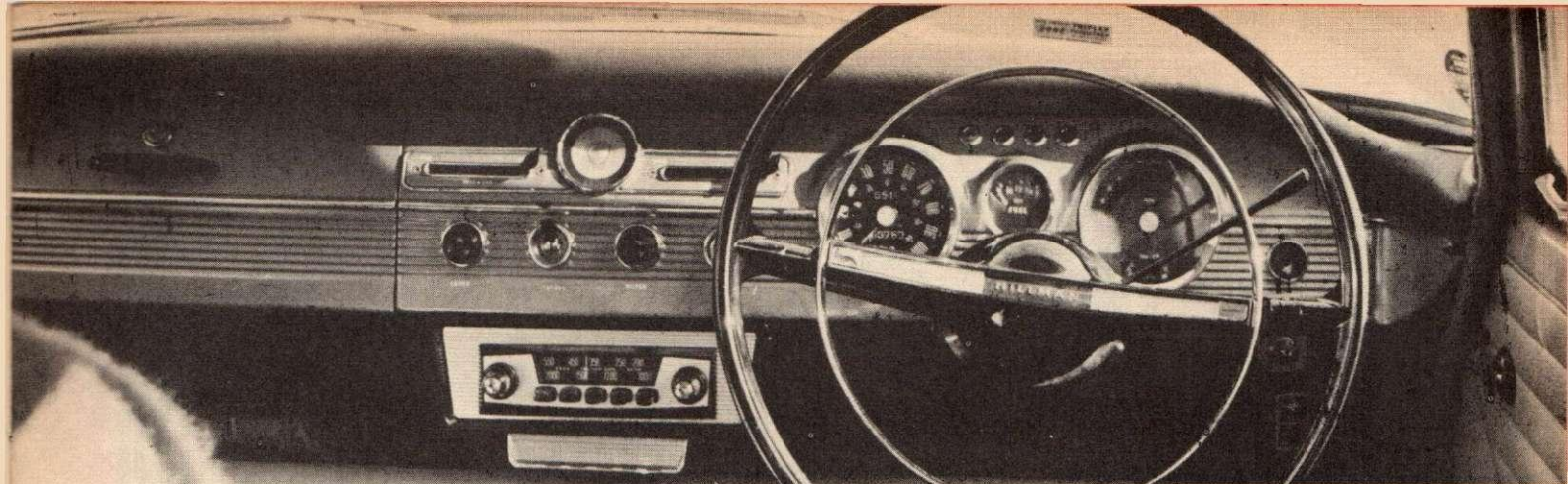
convertible, partly because it has two very wide doors instead of four relatively less weakening ones but largely because it lacks the sheet steel roof on which chassis engineers usually rely for so much rigidity, carries quite a lot of extra metal in the lower platform in the form of welded-up crossmembers and box bracings. The idea is that this local beefing should compensate for loss of strength elsewhere.

Rootes has obviously been careful from the start to banish road-excited body noise in the form of resonance and wheel rumble. In fact we suspect sound and vibration insulation makes up quite a big proportion of the Super Minx's surprising weight. Some of the techniques applied here bring back thoughts of the big Humbers, the Hawk and the Super Snipe, which were quite revolutionary in the extent to which they insulated passengers from mechanicals and from the road without departing from orthodox suspension ideas. As a final safeguard Rootes bypasses the accessory people by covering bonnet and bulkhead with thick insulating felt.

The fundamental mechanical components to which all this scientific shutting-up is applied are ordinary to a degree which some people are going to call depressing. A few major items, such as the basic engine block and the gearbox and rear axle casings, come from the other medium-size Hillman—the older, less spacious and rather cheaper Minx normal.

The Super Minx supports itself on simple but notably long and flexible leaf springs at the back and on paired double wishbones with coil springs in front. Shook absorbers are telescopic all round and there is a torsional anti-roll bar at the front. The system is identical with that in the older Minx; only the detail design of some of the components is different, as well as the dimensions. These factors obviously have a big effect on handling and stability. Together they account for the vast difference in character between the two cars regardless of their layout similarity.

The Super Minx engine is quite highly developed: in fact it probably represents the logical zenith for a basic unit so old, short of sporting tricks like the twin carburettors and aluminium head of the Sunbeams and the Humber Sceptre. The powerplant itself is a 1592-cc in-line four, slightly over-square at 81.5 by 76.2 mm. It has a side camshaft operating slightly inclined in-line overhead valves via simple forged steel rockers on a



Super Minx dashboard is clinically plain in pseudo-baked enamel, yet neat enough

four-bearing shaft atop a cast iron cylinder head. Inlet and exhaust manifolds are on the left of the engine and the spark plugs are inclined on the right.

Manifolding is quite well contoured for a mass-production family application, obviously with the idea of extracting as many free horses as possible from what is after all a physically small engine for such a big lump of a car. The carburettor is a single-throat downdraught Solex 33 PSEI with a mechanical linkage to the throttle control and a Bowden cable for the choke. It draws air via a long-nose paper element cleaner and petrol through a mechanical fuel pump by General Motors. The mixture reaches the combustion chambers by way of a small hot-spotted equalising chamber and four individual manifold branches and ports. The exhaust manifold is a three-branch type, again cast.

Compression is not uncommonly high at 8.3 to 1 and the engine is cammed for good low-speed torque rather than for revs, so a simple forged three-bearing crankshaft serves adequately. The power train runs via an eight-inch single-plate clutch to the familiar Rootes four-speed gearbox, altered slightly to give a higher first gear.

Of the other running gear, only the brakes call for any detailed description. We have never quite decided whether the smaller family saloon really needs disc brakes rather than drums; often we're inclined to think manufacturers fit them out of a combination of laziness and eagerness to cash in on a status symbol. But there is no harm in their doing that provided the application is properly carried through, and in the Hillman it certainly is. By fitting discs only on the front wheels and keeping the old nine-inch drums at the back Rootes engineers have guaranteed

themselves an adequate handbrake performance (still a problem with some all-disc installations) and managed actually to achieve lower pedal pressures than they had with the earlier all-drum layout.

Bodywork is basically similar for all three Super Minx models. Saloon and station wagon differ externally only in the roof and tail panels, although the wagon does have different windowing in its back doors. The saloon is stylistically excellent as far back as the trailing edges of the doors, but it breaks down rather at the back window and around the taillights. The effect is chopped-off and dumpy and the rigid lines of the chromium decoration on the tail clash badly with the rather self-conscious embryo fins; a pity, because otherwise this is one of Britain's best-looking family cars—as its choice for assembly in Italy proves.

Looks apart, the saloon offers quite a lot. Doors are wide enough to give easy access even for the old and infirm (the back ones are hardly cut away at all, so great is the margin by which Rootes chooses to provide within-the-wheelbase seating). The roof maintains its line long enough to give adequate headroom for back passengers. The boot is big and regularly shaped, with no loading lip and a lid that swings up and out of the way on counterbalance springs.

The Super Minx station wagon gets high marks for styling. Its tail contours fulfil adequately the promise shown in front, and such details as a ribbed roof panel (for rigidity as well as neatness) and a properly sealed and silenced tail-gate mechanism show evidence of more design sophistication than one usually looks for in an inexpensive British product. The utility bodywork serves well. We used the test car to move a lot of bulky and unwieldy office equipment across

London; we found we could get so much on the tailboard and in the space behind the rear seat that it was hardly worth lowering the backrest for a short hop, but when we did the room available was almost embarrassing.

Unlike some dual-purpose bodies, the Super Minx wagon does not restrict space or access for rear seat passengers. On the other hand the convertible does. Partly because of the extra body braces we spoke of and partly because of the mechanism for the hood, it is roughly eight inches narrower in the back and quite a lot less deep. Legroom for rear passengers is restricted and so is the space in the boot, which suffers intrusion from a flexible plastic well for the folded hood. Two wide doors and individual tip-up seats mean that getting-in need not be such a painful business, but it does involve a good deal of shuffling about.

The hood itself is something of a masterpiece. It is styled to blend with the cars' lines in a way we have not seen equalled in a four-seat application anywhere, yet it has a frame mechanism which makes folding or raising it the work of, literally, half a minute. This factor alone is enough to put the Super Minx convertible in a class of its own. In other cars of the type from this and rival manufacturers, nuisance-value has always done so much to counteract the pleasure of having open bodywork that few people have bothered with the extra outlay—or even if they have, they have tried the hood once and contented themselves thereafter with an occasional daring and self-conscious sally in coupe-de-ville form.

The Super Minx sacrifices the de-ville facility altogether (and who cares, now that flexible sunshine roofs are with us in such a big way?) in favour of really easy up-and-

SPORT



**HILLMAN
SUPER MINX**
Rootes Ltd
Piccadilly
London, England

Figures are the mean of several runs in opposite directions, using a corrected speedometer. In the case of sports cars they are recorded with hood and windows in place. Surface: smooth bitumen

ACTION

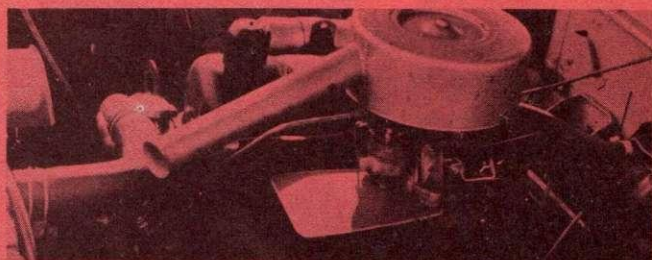
Top speed, mph		88.2
Speeds in gears, mph I		30
II		52
III		71
IV		86
Acceleration, sec. *		
0-30		5.8
0-40		9.2
0-50		14.6
0-60		22.1
0-70		30.5
0-80		NA
0-90		NA
0-100		NA
Fuel consumption, mpg	overall	25.4
	driven carefully	31.2
	normal range	22-28
Braking		
stopping distance from 30 mph, ft		33
degree of fade after 10 stops from 50 mph, per cent		Nil
Speedometer error, mph		
recorded speed	30	true speed 30
	40	40
	50	52
	60	63
	70	73
	80	84
	90	NA
	100	NA
Weight, lb	dry	2256
	kerb	2355
	as tested, with two people	2705
	kerb distribution front	55
	rear	45
		(sal) (conv) (wag)
		2330 2392
		2429 2484
		2779 2834

* SPECIAL NOTE: In this case performance figures are averaged from the capabilities of all three versions, so that in effect they represent a mean between the slightly slower station wagon and the marginally faster convertible.

SPECIFICATION

General		
List price, UK purchase tax paid, £		744
Delivery UK, weeks		2-3
Road tax UK annually, £		15
Approx insurance UK annually, £		
	London	40
	country	21
Guarantee period miles		12,000
months		12
Dimensions, in		
Wheelbase		101
Track	front	51.5
	rear	48.5
Length		165
Width		63.75
Height		(sal, wag) 58.25
		(conv) 57.25
Ground clearance		(sal, wag) 6.5 (conv) 5
Headroom	front	38.5
	rear	36
Legroom	front	32.5-36.5
	rear	42-48
Hiproom	front	45
	rear	48
Shoulder room	front	50
	rear	50
Engine		
Material		Iron
Cooling		water
Configuration		In-line
Valve gear		pushrod overhead
Cylinders		four
Bore, mm		81.5
Stroke, mm		76.2
Capacity cc		1592
Piston area, sq in		32.4
Compression		8.3
Carburettors		single Solex 33 PSEI

Legroom measurements are for the whole leg, taken from the back of the cushion to the furthest convenient point on the floor



TRANSMISSION

Type		Manual gearbox
Number of speeds		4
Synchromesh, type		baulk ring
arrangement		top three
Control		remote, floor
Ratios, overall		(sal, conv) (wag)
I		13.01 14.13
II		8.32 9.04
III		5.41 5.88
IV		3.89 4.22
Clutch		dry single-plate
Propellor shaft		open
Final drive type		hypoid bevel
ratio		3.89 (sal, conv)
		4.22 (wag)
		6.00 by 13
Steering	Type size	recirculating ball
Type		36
Turning circle, ft		3-2
Turns lock to lock		3-2
Brakes	Type	hydraulic
Operation, front		disc
rear		drum
Size, in front		10.3
rear		9
Suspension	Swept area, sq in	298
Type	Friction area, sq in	80.5
Operation, front		steel springs
rear		coil, wishbones
Dampers, front		leaf, rigid axle
rear		telescopic
Anti-roll bar front		telescopic
rear		torsional
Structure	Type	NA
Material		monocoque shell
Number of seats		steel
doors		4/5
Location of luggage space		4 (sal, wag) 2 (conv)
		rear boot (sal, conv)
		rear platform (wag)

CALCULATION

Engine power, bhp/rpm	62 at 4400
Engine torque, lb ft/rpm	86.3 at 2500
Usable rpm range	1500 to 5000
Mph per 1000 rpm, top gear	17.6 (sal and conv)
Mph per 1000 ft min piston speed, top gear	35.2
Mph at peak power, top gear	77.4
Mph at peak torque, top gear	44
Piston speed at peak power, ft min	2200

OPERATION

Fuel	Type	premium
Capacity, gal		10.25 (sal, conv) 10 (wag)
Range, miles		220-280
Pump type		AC mechanical
Oil	Type, SAE	10 W/30
Capacity, pints		8
Change interval, miles		3000
Lubricant	Type, SAE (oil)	90
grade (grease)		normal
Number of points		None
Change interval, miles		None
Air	Tyre pressures front	25
rear		25
High-speed pressures front		28 (sal, conv) 28 (wag)
rear		28, 33
Electricity	Battery type	wet cell
Location		front right
Voltage		12
Amperage		38
Current		direct
Number of fuses		2
Location		scuttle
Number of spark plugs		4
Type		Champion N5
Gap setting, in, plugs		.025
Contact breaker		.015



L down action and a tautness of fabric that makes the car almost better-looking with the hood up.

Raised and with all windows up, the hood gives a first-class seal via soft rubber strips against rain and draughts. It is also flap-proof even at maximum speed in a crosswind.

Driving position in the Super Minx varies with the model. The latest versions of the saloon and the station wagon have seats very much in the modern manner, with webbed rubber cushions and shallow but slightly shaped bolstering at front, sides and top. They are big seats, offering support as high as the shoulders and right under the thighs; altogether we found them comfortable well beyond the usual family-car limits.

The convertible's seats are less satisfactory. They are surprisingly

hard and somewhat perchy, with cushions that are too flat and squabs which we found over-vertical. The saloon and station wagon items give marginal support from the cushion for cornering, the convertible seats none.

Rearward adjustment range is just enough in all three cars to put a tall driver at ease. Full-arm stretch isn't quite possible, but then neither is it really desirable in a car that is anything but sporting. Visibility is good forward through a wide and steeply curved screen, although tall men tend to have trouble seeing under the top rail in the convertible because the seats are higher. Headroom is adequate and rear vision excellent in all versions. Visibility in the rain would be better if Rootes fitted wiper blades which wipe round

corners. As it is, the blades leave the screen at the point where the glass wraps over.

Comfort in the rear is obviously relative. Quite thin backrests on the front seats coupled with deep footwells in the carpeted floor mean that two people can be quite comfortable in the back of the saloon. There is room for a third on short hops, but he gets a pretty poor ride because of the transmission tunnel and because the seat cushion is cut thin in the middle to allow for the final drive. There is no intrusion at the sides from the wheel arches. The doors do not have armrests or pockets (they don't in the front either) but there are plenty of ashtrays. There is a shelf behind the rear seat. We found it took some people a long time to get the hang of the pull-out door catches



MINI ROAD TEST

From the front, Super Minx is among our happiest-looking saloons. Tail is dumpy

Seats fitted to saloon and wagon show careful design. Convertible's are poorer

Station wagon body is wonderfully useful, but tailgate has stiff and clumsy catches

SMALL CAR comes to Mitre House! Super Minx helped in last stages of move

in all models of the Super Minx.

The station wagon has a back seat which is slightly harder and less generously proportioned than the one in the saloon, but it still gives acceptable comfort for two on quite long trips provided tall people in the front don't make things too difficult.

The back seat of the convertible is less satisfactory than the others. Because of its restricted dimensions it is probably best to think of it as a fairly luxurious *occasional* seat for two rather than as regular accommodation, although children up to their middle teens are quite happy there even on long trips. Headroom is short for tall people and so is kneeroom with the front seats back. With the hood down the seat becomes much more useable because there are more places to put arms and shoulders, but even with all the windows up there is the usual charabanc feeling of wind-on-the-heath above about 40 mph.

The Super Minx in all its models has a satisfactory if not outstanding driving position. The wheel is quite big and fairly high-set, with a horn ring in its middle and a rim contour that gives a good grip without harshness. Pedals are offset, oddly, to the right—presumably to give off-street parking for the driver's left foot. Except for the organ-type accelerator, they are annoyingly heavy to use.

The gear lever is intelligently sited atop an enormous transmission hump in the centre of the neatly carpeted floor.

The handbrake, a sturdy pull-up lever, lies on the floor to the driver's right.

Instruments live in three dials, two big ones on either side of the steering column and a small one for the fuel gauge in between. The speedometer takes up all of the left-hand circle, along with trip

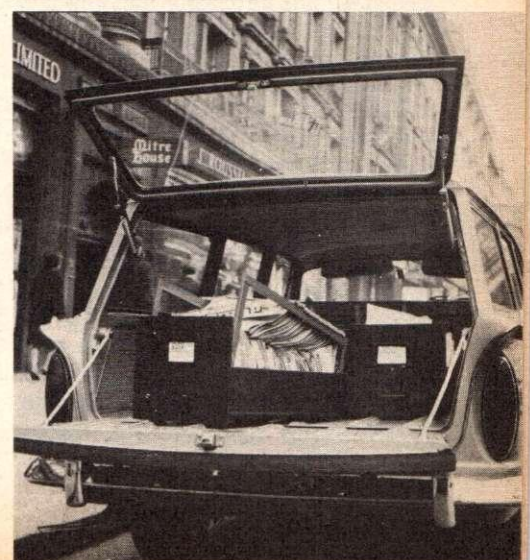
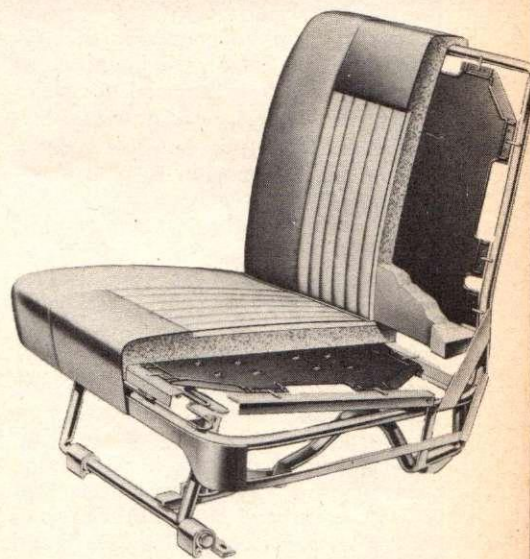


and total mileage strips (including decimals). The opposite dial is designed to take three auxiliary gauges, but as usual the Super Minx comes with only one fitted: a water thermometer. You must order the rest separately, along with a clock to replace the round plaque in the centre of the dash if you like. Rootes continues its habit, inherited when it took over the old London Talbot factory, of marking instruments metrically as well as in English—a good thing—and also of calibrating the fuel gauge in gallons instead of the usual E-1-F nonsense.

Minor controls are well enough located. Choke, lamps, wipers and ignition have differently shaped switches and knobs in the middle of the dash; the choke is rather too far away to reach comfortably with a safety belt on, but otherwise all is well. Heater and demister slides are just above, impossible as usual to get the hang of on short acquaintance but productive of adequate results when you fetch the book and spell it all out. The other switches, under the lip of the dash in front of the driver, are less satisfactory because unmarked. The bonnet release is a T-handle down below the padded parcel shelf which runs across the whole width of the car, supplementing a wide but rather shallow lockable glovebox—useful in the convertible at least.

The winker stalk incorporates an efficient headlamp flasher.

Safety in the driving compartment is obviously a consideration with Rootes. The thick crash roll which covers the tops of the dash is resilient enough to be a real help in a bad prang, even if the strip of foam plastic in front of the parcels shelf is not. Sun visors are the flexible foam kind, a good idea (the passenger's has a small mirror), and the door catches point away from



the people. Items we didn't like the look of accident-wise were the projecting knobs in front of the passenger (particularly a beltless middle one, whom you might be tempted to carry since the seats, except on the convertible, meet in the middle) and the window winders, which in some positions are apt to knock the driver's knee.

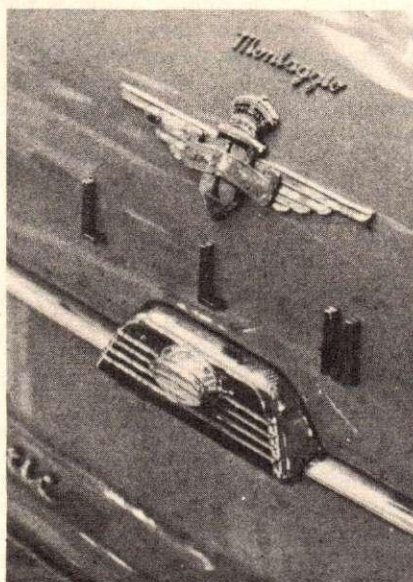
The Super Minx does not always start at once. The delay comes when it is either very hot or very cold; in both cases you must sometimes give it three or four bursts on the starter to get lasting results. Warm-up takes longer than it should, although luckily the choke gives quite fine adjustment so there is no need for any kangaroo antics. The engine is quiet in most ways, in fact surprisingly so considering its size and degree of stress, but it is inclined to make its presence felt via a subdued but still audible rumble at low speeds.

The big fault with Rootes gearboxes has always been noise. The Super Minx is no exception in that it emits a distinct growl in first and an audible whine in second and third. In other respects the box is satisfactory. Its ratios are intelligently spaced to give lusty performance both on hills and for overtaking—in fact outstanding performance for such a rugged car. First, as we said, is strictly for starting only (you can use second but it is unkind to the clutch) but the other three ratios are very much driving gears. Third will take you well over an indicated 70 and second is the ideal ratio for nifty cornering in winding country lanes. Top is unusually high for a heavy British car and particularly high for a Rootes one, a change of heart which most owners will welcome since it means the Super Minx will hold 90 mph on the clock (a genuine 85) for the entire length of any motorway in England.

The gear change itself is good without being outstanding. It has synchromesh powerful enough to resist all but lightning-fast changes (it will even take those from third to top) but a poorly chosen reverse resist mechanism means that an enthusiastic attempt to snatch second gear for a corner can often result in a loud shriek of protest as the lever wrong-slots.

Apart from the slight engine rumble and gearbox whine we spoke of, both of which disappear as speed rises, the Super Minx is an extremely quiet car. It will ghost along in top at 50 or 60 mph with only very moderate wind noise and not a murmur from the mechanicals, and even with the engine

UPHROAST



Status symbol! Super Minx's virtues give it a ready sale in Italy, where assembly contractor Touring adds his famous cachet

pulling in third it's hard to believe you are in anything but a genuine big car. Wind roar is more of a problem, rather naturally, in the station wagon with its uncompromising tail. What little there is in the saloon and convertible takes the form of a shrill whistle from the corners of the rain gutters.

The Super Minx has rather unimpressive steering. It is low-geared, with a lot of whip or lost motion around the straight-ahead position, and it transmits too little feel from the road to the driver's hands.

Marked heaviness tends to discourage really energetic cornering. It may even fool you into thinking the Super Minx is unwilling to

Last month's first Giant Road Test contained an error which affected our conclusions. We said the Ford Cortina GT cost £649; in fact it costs £100 more. We apologise sincerely to every reader

behave itself in corners, but that isn't strictly true. Certainly the car understeers markedly and gives off a lot of tyre noise, but if you insist and particularly if you help matters by pumping the tyres up five or six pounds above normal, it will give a surprisingly good account of itself. Pressed to extremes, the whole car will slide bodily until you back off.

Braking is a field in which it is becoming harder to find fault. Most ordinary cars these days are good, a few excellent. The Super Minx comes about halfway in between. It stops sharply and consistently from any speed of which it is capable, with no fade and little mess or smell. Pedal pressures are relatively low for panic stops but over-high for light braking.

Ride, too, is generally satisfactory. It is soft enough to be comfortable but not floppy, yet firm enough to give control without excessive roll or body-sway in corners. Isolated bad bumps produce little effect and almost no sound at all, and the car will attack whole stretches of shockingly mutilated road with no special qualms. At least, the saloon version will. The station wagon is less happy on really bad going because of its choppy rear springing.

The convertible—well, it's sad to have to report that in spite of Rootes engineers' patient attempts at strengthening their latest roofless structure the Super Minx convertible suffers from scuttle shake and body distortion on bad roads to an extent that is frightening. The only answer is to stay off unmade routes altogether, or at worst to take them very slowly indeed. At anything above 30 mph, especially with the hood down, body tremors becomes so bad that the doors threaten to come open.

Is the Super Minx just another bread-and-butter family car? In most ways it is, but then that is hardly a criticism in Britain today. Apart from the body shake in convertible form which we have just mentioned, the Super Minx has no apparent major faults and a great many virtues. As a saloon it is roomy, acceptably comfortable, surprisingly fast, smooth, quiet and safe. It has no sporting breeding or pretensions, and rightly so. The station wagon sacrifices a little bit of refinement for even greater practicality—an excellent dual-purpose family automobile. The convertible loses quite a lot of space and virtually all suitability for very bad roads but gains in glamour, versatility and (you may think) sex-appeal.