



WOW!
A Mini with a Maxi boot

**The NEW
Mini 1000 MK III**



Leykor brings you the Mini MK III
and motoring as you would like it.

Leykor 



LEYKOR

Mini

* Not the prettiest, perhaps — but the new "Mini with a boot" scores on handling and versatility . . .

A CAR ROAD TEST

THE Mini is coming up for its tenth birthday in South Africa, and to celebrate the occasion we have a new model, the Mark Three — best described as "the Mini with a boot".

South Africa's Mini Mk. 3 has the extended rear end which gives it a luggage capacity of nearly 8 cu. ft. 50 per cent more than the luggage capacity of the standard Mini.

This makes the little car 8·5 inches longer and about 80 lb.

1000 MK. 3

heavier than before, with a small rear overhang. The trunk extension looks a bit like the appendage it is and does not improve the car's looks, but its functional importance is that the car now has space for big packages when shopping, and sizeable suitcases on holiday trips.

NAME PROBLEM

There is bound to be some interest in why the name "Mark 3" was chosen for South Africa, so it is worth recording that it was originally intended to market the booted Mini here as the "Mini Elf" in Austin and Morris versions, but the name "Elf" had already been registered in South Africa by another manufacturer for a commercial vehicle.

So "Mark 3" it is.

For this Test, a prototype from the Leykor plant at Blackheath was used. It is an addition to the existing Mini range in the Republic.

SUSPENSION CHANGE

Besides the changed shape, the Mini Mk. 3 has quite a few changes and improvements over earlier Mini models, and these — we understand — will be incorporated in the other Mini models as well, from late 1969 models onwards.

Most notable is that it reverts to the original Mini dry-cone suspension all round, giving it that firm and bouncy characteristic associated with the pre-Hydrolastic Mini's.

This change is made to comply with South African local content requirements: it was not feasible at

SPECIFICATIONS

ENGINE:	
Cylinders	4, transverse
Carburetor	Single SU-HS2
Bore	2·543 in. (64·59 mm.)
Stroke	3·00 in. (76·2 mm.)
Cubic capacity	80·95 cu. in. (996 c.c.)
Compression ratio	8·0 to 1
Valve gear	O.h.v., pushrod
Main bearings	Three
Aircleaner	Dry moment
Fuel rating	Premium
Cooling	Water, 5·25 pints
Electricity	12 volt DC
ENGINE OUTPUT:	
Max. b.h.p. S.A.E.	39·0
Max. b.h.p. net	33·2
Peak r.p.m.	5,000
Max. torque/r.p.m.	52·5/2,700
TRANSMISSION:	
Forward speeds	Four
Synchronesh	All
Gearshift	Floor
Low gear	3·62 to 1
2nd gear	2·00 to 1
3rd gear	1·412 to 1
Top gear	Direct
Reverse gear	3·608 to 1
Final drive	3·005 to 1
Drive wheels	Front
Tyre size	5·20 x 10
BRAKES:	
Front	7-in. drums
Rear	7-in. drums
Total lining area	14·2 sq. in.
Boosting	NIL
Handbrake position	Between seats
STEERING:	
Type	Rack and pinion
Lock to lock	3·3 turns
Turning circle	31·8 ft.
MEASUREMENTS:	
Length overall	126·7 in.
Width overall	55·5 in.
Height overall	53·0 in.
Wheelbase	80·2 in.
Front track	47·5 in.
Rear track	45·9 in.
Ground clearance	6·2 in.
Licensing weight	1,397 lb. approx.
SUSPENSION:	
Front	Independent
Type	Dry cone
Rear	Independent
Type	Dry cone
CAPACITIES:	
Seating	4/5
Fuel tank	5·5 gal.
Luggage trunk	7·86 cu. ft. net
SERVICE DATA:	
Sumo/gearbox/diff. capacity	8·0 pints
Change interval	Up to 3,000 miles
Oil filter capacity	0·6 pints
Change interval	Up to 6,000 miles
Air filter change	Up to 12,000 miles
Greasing points	8
Greasing interval	Up to 3,000 miles
(These basic service recommendations are given for guidance only, and may vary according to operating conditions. Inquiries should be addressed to authorised dealerships.)	
TYRE PRESSURES:	
Crossply: Front	24 to 28 lb.
Rear	22 to 28 lb.
Radial ply: Front	28 to 32 lb.
Rear	26 to 32 lb.
WARRANTY:	
Six months or 6,000 miles.	
BASIC PRICES:	
Coast	Not established
Reef	Not established
PROVIDED TEST CAR:	
Leykor, Blackheath, Cape.	
STANDARD EQUIPMENT:	
Door pockets, windscreen washers, rear brake pressure relief valve, bumper overriders.	

MAKE AND MODEL:

Make BMC
Model Mini 1000 Mk. 3

PERFORMANCE FACTORS:

Power/weight (lb./b.h.p.)	41.7
Frontal area (sq. ft.)	20.5
Drag at 60 m.p.h. (lb.)	92.0
M.p.h. / 1,000 r.p.m. (top)	16.2
(Calculated on licensing weight, gross frontal area, gearing and net b.h.p.)	

INTERIOR NOISE LEVELS:

	Min.	Wind	Road
Idle	54.0		
30 m.p.h.	73.0	73.5	83.0
45 m.p.h.	77.0	79.0	87.0
60 m.p.h.	82.0	84.0	91.0
Full throttle		See graph	
Average (dBA) at 60		85.7	

(Measured in decibels, "A" weighting, averaging runs both ways on a level road; "Minimum" with car closed; "Wind" with one window fully open; "Road" on a coarse gravel surface.)

ACCELERATION FROM REST:

0-30	5.8
0-40	9.0
0-50	12.7
0-60	18.6
0-70	25.8
1/4 Mile	21.8

OVERTAKING ACCELERATION:

	3rd	7th
20-40	8.0	12.0
30-50	9.9	13.0
40-60	14.7	17.9
50-70	—	32.9

(Measured in seconds, to true speeds, averaging runs both ways on a level road, car carrying test crew of two and standard test equipment.)

MAXIMUM SPEED:

True speed	76.7
Speedo reading	84.0
Calibration:	
Indicated	
20 30 40 50 60 70	
True speed	18 27 36 45.8 55 65

FUEL CONSUMPTION:

30 m.p.h.	56.4
45 m.p.h.	47.5
60 m.p.h.	38.6
Full throttle	See graph
(Measured in miles per Imp. gallon, averaging runs both ways on a level road.)	

BRAKING TEST:

From 50 m.p.h.	
First stop	2.3
Tenth stop	3.0
Average	2.88

(Measured in sec., with stops from true speeds at 30-sec. intervals on a good bitumenised surface.)

GRADIENTS IN GEARS:

Low gear	1 in 3.6
2nd gear	1 in 5.1
3rd gear	1 in 6.3
Top gear	1 in 14.5

(Tabulated from Tolley's readings, car carrying test crew of two and standard test equipment.)

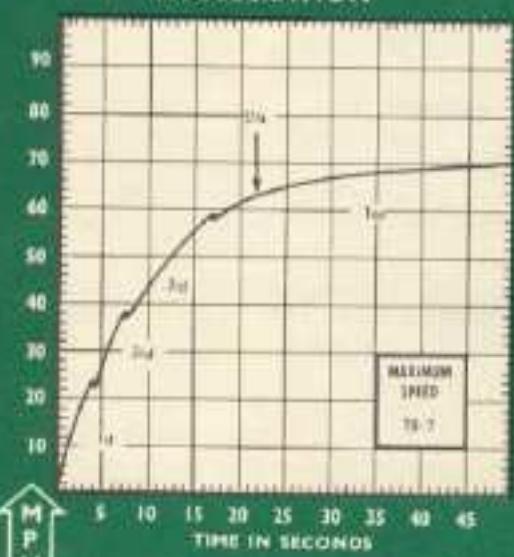
GEARED SPEEDS:

Low gear	21.0
2nd gear	33.5
3rd gear	32.4
Top gear	33.8
(Calculated to true speeds, at engine peak r.p.m. — 5,000.)	

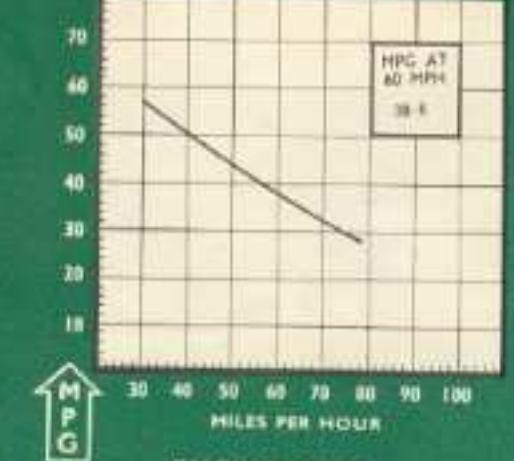
INTERIOR NOISE LEVEL



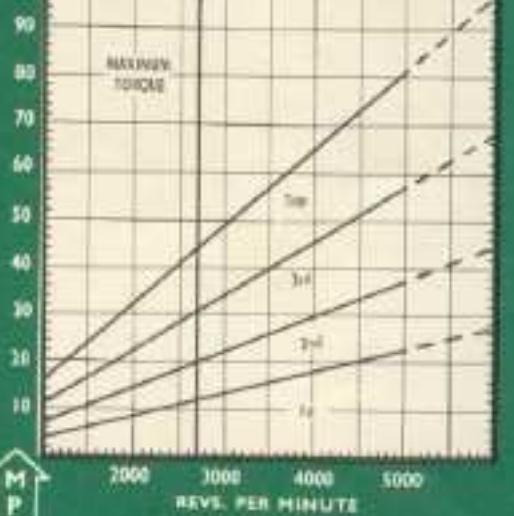
ACCELERATION



FUEL CONSUMPTION



ENGINE SPEED



SILENCE LEVELS:

Mechanical	Poor
Idling	Fair
Transmission	Good
Wind	Very Good
Road	Very Poor
Coachwork	Very Good
Average	Fair

ENGINE:

Starting	Very Good
Response	Very Good
Smoothness	Fair
Accessibility	Poor

STEERING:

Accuracy	Very Good
Stability at speed	Very Good
Stability in wind	Good
Steering effort	Very Good
Roughness	Poor
Road feel	Poor
Centring action	Good
Turning circle	Good

TRANSMISSION:

Clutch action	Good
Pedal pressure	Good
Response	Good
Fade resistance	Fair
Directional stability	Good
Handbrake position	Good
Handbrake action	Good
Synchromesh	Very Good

SUSPENSION:

Firmness rating	Very Good
Progressive action	Excellent
Roadholding	Good
Roll control	Excellent
Tracking control	Good
Pitching control	Very Good
Load ability	Very Good

DRIVER CONTROLS:

Hand control location	Good
Pedal location	Good
Wiper action	Good
Washer action	Good
Instrumentation	Fair

INTERIOR COMFORT:

Seat design	Good
Headroom front	Very Good
Legroom front	Good
Headroom rear	Very Good
Legroom rear	Good
Door access	Fair
Lighting	Good
Accessories fitted	Poor
Accessories potential	Good

DRIVING COMFORT:

Steering wheel position	Very Good
Steering wheel reach	Very Good
Visibility	Excellent
Directional feel	Fair
Ventilation	Poor
Heating	Nill

COACHWORK:

Appearance	Good
Finish	Good
Space utilization	Excellent
Trunk capacity	Good
Trunk access	Fair

TEST CONDITIONS:

Altitude	At sea level
Weather	Cool and damp
Berometric reading	30.63
Fuel used	93-octane
Test car's mileage	7,883



this stage to manufacture Hydrolastic units in the Republic.

CONES IN CHARACTER

There will not be many tears shed over the return to dry-cone suspension — it fits the Mini character well, and with its greater firmness it eliminates pitching motion and gives greater stability under load — an important feature with the increased trunk space.

We found it quite thrilling to ride on Mini rubber cones once again — the car feels more "live" and responsive to controls. While the Hydrolastics are ideal on the 1100 models, their only real virtue on the Mini was greater smoothness, plus elimination of shock absorbers.

GOOD HANDLING

The Mark 3 certainly feels good on cones, and handles extremely well. We wondered whether the extra rear weight and overhang might increase the tendency for the rear wheels to break in hard cornering, when power is taken off the front wheels, and did some thorough testing in this department.

The results were very reassuring: it seems that the extra weight improves rear-wheel adhesion, because we found it all but impossible to bring the tail out by lifting off the throttle in a tight turn, even with standard crossply tyres.

With radials, handling would be even better, so it seems that the booted Mini is one up on the sleeker standard models in the handling department.

IMPROVED BRAKES

The Leykor engineers are always at work improving their cars, and they have done wonders with the Mark 3 in mechanical improvements, which will be passed on right through the Mini range.

Take the brakes, for instance: these are still drums all round, with two leading shoes and wider linings at front, plus a new pressure-limiting valve in the rear system. But the size of slave cylinders at the wheels has been increased, resulting in much easier pedal pressure and slightly-improved stopping ability.

ALL-SYNCHRO SHIFT

The tyro's will cheer that, at long last, a full-synchromesh gearbox has been introduced, so no more double-declutching is needed to select "Low" while on the move. The shift has quick remote control with a short lever, and is very fast with its baulking synchromesh system.

The only snag is the wide gate between 1st/2nd and 3rd/Top: it takes quite a bit of practice to get a snap-change from 2nd to 3rd — with the ever-present danger of selecting 1st again by mistake!

ENGINE AND COOLING

Engine is the 998-c.c. version (designated 9AK/WE/H) introduced earlier in the Mini 1000 models, using an 1100 cylinder head to drop compression ratio from 8.3, to 8.0 to 1. It goes freely to 5,000 r.p.m. and has a handy spread of torque to give sound performance.

To reduce noise levels, a vibration damper has been introduced on the crankshaft, which smooths the motor. It works — we found this to

be the quietest Mini (mechanically) we have tested, though that is not saying over-much.

The latest cooling system is sealed, with an expansion tank and a larger water pump for improved circulation. Cooling system pressure is 13 lb., and this should give the car plenty of cooling reserve for those long, fast trips in the South African summer.

PERFORMANCE FACTORS

The changed 1st and 2nd gear ratios give the car slightly more range at the lower end in acceleration tests, though the car remains undergeared with the 3.765 to 1 diff. ratio.

This gearing only allows 57.3 m.p.h. in 3rd, though the car will actually go to a true 60 quite comfortably.

The Mk. 3 is penalised slightly by its weight increase, which gives it a weight-power ratio of 41.7 lb./b.h.p., compared with the 38.5 lb./b.h.p. of the ordinary Mini 1000, and makes for a considerable performance difference between the two models.

It claws its way from a standing start with a fair amount of wheelspin, and accelerates quite briskly. A companion with the February, 1966, Test of the Mini 1000:

	Mini	Mk. 3
0-40	8.6	9.0
0-60	21.1	23.6
1 Mile	21.6	21.8
Speed	79.1	78.7

Over 60 m.p.h. there is not much in reserve, and overtaking in the cruising-speed range would require a good stretch of clear road.

FUEL ECONOMY

The Mini's, as a family, are light on fuel, and the long-stroke 1000 models score particularly high marks in this sphere. The Mk. 3 should return something like 35 m.p.g. plus, even in about-town use with a heavy foot.

The worst possible is something over 30 m.p.g., and in this department it matches the earlier 1000—and is even a bit more economical in the middle-speed range.

STOPPING ABILITY

The lighter brake pedal on the new model gives the same stopping power with less effort than before, which will appeal particularly to

DATA AT 70

Max. noise level	86.0 dBA
0-70 through gears	45.8 sec.
Mean at 70	22.9
Braking from 70	4.3 sec.
Reverse power at 70	0.015 g.
Max. gradient at 70 (top)	1 in 6.6
Speeds error at 70	7.0% over
Speeds at true 70	75
R.a.m. at 70 (top)	4,780

women drivers. It almost has the effect of gentle brake boosting, and allied with a device to prevent rear-wheel locking, it gives the Mk. 3 sound stopping ability.

There is no evidence of fade in repeated stops from 50 m.p.h., and a stop from 70 causes only mild heat symptoms.

VENTILATION AND NOISE

The Mini ventilation system is non-existent, but the winding windows on recent models allow a good through-flow of air, without causing much noise.

As we remarked earlier, mechanical noise levels are down on the Mk. 3, though still fairly high even by light car standards.

Wind noise is comparatively low, and road noise is excessive: the little 10-inch wheels seem to pick up every bit of road noise and pass it to the interior.

HANDLING AND RIDE

This is the bouncy Mini back again: it will cheerfully hop all four wheels clear of the road on bad bumps at speed, and the driver has the sensation of being close to the road in terms of feel.

The car has a vital feel and almost instantaneous recovery on bumps which go well with its responsive handling. We enjoyed driving the Mark 3 as a contrast to the rather mushy ride of many bigger cars.

It is not uncomfortable, and the little car goes exactly where the driver wants it to. In about-town handling it is a delight.

Load presents no problems, but this is no car for towing built-up caravans over any serious distance.

Instrumentation and controls are as for the standard Mini 1000 in its latest form.

SUMMARY

There can be no complaints about the selection of Mini's now available in South Africa: 1000 standard, and station wagon, 1000 "S" performance model, and now—the Mini

Mk. 3 with its extra luggage capacity.

This is a bright addition to the range, and should be eagerly accepted in the growing "second-car" market. The Mk. 3 is equipped for supermarket tours, children's school cases and other carrying jobs. It is still Mini through and through, but with more versatility. *



The addition of a trunk compartment at the rear alters the box-like Mini character.



The extra weight at rear improves rear-wheel adhesion, and the car can be cornered with zest.



The bigger luggage trunk adds a bulge and 8½ in. of length to the car, but gives 8 cu. ft. carrying capacity. The lid rises upward to give clear access.