



MINI MOST

104 m.p.h. with a Speedwell Mini Cooper

With the exception of the highly tuned Zagato Mini (*The Motor*, March 1st 1962) that was much better shaped for dashing about at high speeds, the Speedwell Cooper seen above is the fastest Mini yet tested by *The Motor*. A mean maximum of 104 m.p.h. and a one-way best of 107 m.p.h. is not bad by 1,000 c.c. saloon standards, especially in a car that is meant for the road and not the track. Nor do the impressive performance figures speak entirely for themselves for the maximum was taken on a banked track which at this speed probably slowed the car on the corners by 2 or 3 m.p.h. When we tried again 1,000 miles later on a flat road, the car was no faster, indicating that it may have lost a bit of tune. Despite a high final drive ratio fitted to give effortless high-speed cruising, the acceleration is also the best yet: even better figures would have been recorded with the standard ratios although, all told, the sacrifice is worth making. Ninety m.p.h. is a natural cruising speed (5,500 r.p.m.) and 100 m.p.h. doesn't need a very long straight to reach. With such good handling and steering and a small overall size, this Mini is certainly one of the fastest A-to-B cars we have driven.

The engine has Speedwell's "Clubman" alloy head, a capacity of 1,150 c.c. achieved by enlarging the bore and fitting special pistons, new valve gear, larger twin S.U.s, lightened and balanced parts and strengthened main bearings. For this £200-worth of mods, one expects a lot: one gets it. The engine always started easily, hot or cold, and the choke was seldom needed, even after leaving the car out on a cold night. Roughness at the fast idling necessary to avoid fouling the plugs (which never occurred during our test) gives way to smoothness as the revs rise: only above peak power (82 b.h.p.) at 6,800 r.p.m. did the engine begin to feel strained although a very adequate performance is available without exceeding the more durable 6,000 r.p.m. The red line was at 7,500 which we observed during the acceleration runs.

As on other Speedwell conversions we have tried, the throttle must be fed in progressively at low revs for the best acceleration, reaching full throttle by about 3,500 r.p.m. The technique seems unnatural at first but one soon becomes accustomed to it. In comparison with the tremendous surge that drags the car forward as the power really comes in, low-speed torque feels meagre but the stop-watch shows that flexibility is almost identical to that of a standard Cooper. Clearly it would be much better with similar gearing.

Throttle opening rather than revs affects the noise level so that cruising at 80 m.p.h. on a light throttle there is possibly less noise inside than from a standard Cooper. Only on hard acceleration does the extremely loud and characteristic bark from dual exhausts reverberate through the car and a good distance round it. Care was needed in towns to avoid attracting too much attention and the noise level could well be subdued without detracting from its stimulating effect.

Fuel consumption on a tuned test car is usually regarded as an indication of how hard we drove it: a sort of enjoyment meter. On this basis, the 21.5 m.p.g. overall indicates tremendous entertainment—which it was. As the steady speed fuel consumption figures show, it would be possible with much more gentle driving to exceed the 34.6 m.p.g. recorded during the road test of the Mini-Cooper but it would take great (and pointless) determination not to drive the Speedwell car hard. Most owners would probably be a little kinder than we were and would almost certainly record a better overall figure.

The mods did not end with the engine. Of the many other extras, the Restall de luxe seats were outstanding and made a major contribution to our enjoyment of the Car. As our tallest (6ft. 4in.) member observed, "This is the first Mini I have been really comfortable in". His opinion was echoed by everyone else, the sacrifices being rather inaccessible hand-brake and no room for second gear if the passenger's seat was pushed forward.

It was difficult to assess the value of a rear anti-roll bar since the C41 tyres were at over 40 p.s.i. for 100 m.p.h. motor-ing and themselves made the steering extremely sensitive. Other extras included a useful headlamp flasher (18s. 6d), wooden dash (£3 7s. 6d.) to accommodate an electronic rev counter (£17 10s. and almost essential with such a high revving engine) and oil and temperature gauges (£5 10s.). There was also a brake servo (£13 10s.) which we feel could not have been functioning properly since the brakes were considerably poorer than those of a standard Mini-Cooper staff car, a delightful wood-rimmed steering wheel (£11 19s. 6d.), oil cooler (£13 10s.) and Kenlowe fan (£12 10s.). The 3-44 final drive ratio costs £5 and an exhaust manifold (not included in the price of the conversion) costs £8 15s.

PERFORMANCE COMPARISONS—SPEEDWELL MINI-COOPER

	Mini-Cooper	Mini-Cooper S	Speedwell Mini-Cooper
Maximum speed			
Mean	85.2 m.p.h.	91.8 m.p.h.	104 m.p.h.
Best	87.4 m.p.h.	93.8 m.p.h.	107.1 m.p.h.
Acceleration from standstill			
0-30 m.p.h.	4.8 sec.	4.0 sec.	3.4 sec.
0-40 m.p.h.	7.7 sec.	6.9 sec.	5.9 sec.
0-50 m.p.h.	11.8 sec.	9.0 sec.	7.8 sec.
0-60 m.p.h.	17.9 sec.	12.9 sec.	10.4 sec.
0-70 m.p.h.	26.5 sec.	17.7 sec.	14.8 sec.
0-80 m.p.h.	41.3 sec.	23.2 sec.	19.2 sec.
0-90 m.p.h.	—	40.1 sec.	25.5 sec.
Standing 4-mile	21.1 sec.	19.9 sec.	17.8 sec.
Acceleration in the upper ratios	Top	Third	Top
10-30 m.p.h.	12.2 sec.	7.4 sec.	11.8 sec.
20-40 m.p.h.	11.8 sec.	7.5 sec.	10.4 sec.
30-50 m.p.h.	12.7 sec.	7.9 sec.	11.0 sec.
40-60 m.p.h.	13.5 sec.	8.4 sec.	10.8 sec.
50-70 m.p.h.	15.5 sec.	—	12.1 sec.
60-80 m.p.h.	30.9 sec.	—	18.0 sec.
70-80 m.p.h.	—	—	26.4 sec.
Fuel consumption at steady speeds			
20 m.p.h.	55.5 m.p.g.	57.5 m.p.g.	55.9 m.p.g.
40 m.p.h.	53.0 m.p.g.	54.5 m.p.g.	51.5 m.p.g.
50 m.p.h.	47.0 m.p.g.	50.5 m.p.g.	49.8 m.p.g.
60 m.p.h.	41.0 m.p.g.	42.5 m.p.g.	42.7 m.p.g.
70 m.p.h.	34.5 m.p.g.	36.5 m.p.g.	41.2 m.p.g.
80 m.p.h.	—	27.0 m.p.g.	33.6 m.p.g.
90 m.p.h.	—	21.5 m.p.g.	29.2 m.p.g.
Overall fuel consumption	34.6 m.p.g.	36.8 m.p.g.	32.0 m.p.g.
Typing fuel consumption	40.5 m.p.g.	38.5 m.p.g.	37.5 m.p.g.



The Restall de luxe seats, fully adjustable for rake, are extremely comfortable. Lateral support is better than it looks.



The Modified "A" series engine has a capacity of 1,150 c.c., a claimed output of 82 b.h.p. at 6000 r.m.p. and 70 lb. ft. torque at 4,500 r.m.p. A brake servo fills most of the available space to the left of the engine.



Interior extras include the wooden fascia panel, rev counter, oil and temperature gauges, headlamp flasher, wood-rimmed steering wheel and, unseen, a modification to the gearchange lever that effectively cured the notorious "A" series gearlever chatter.