

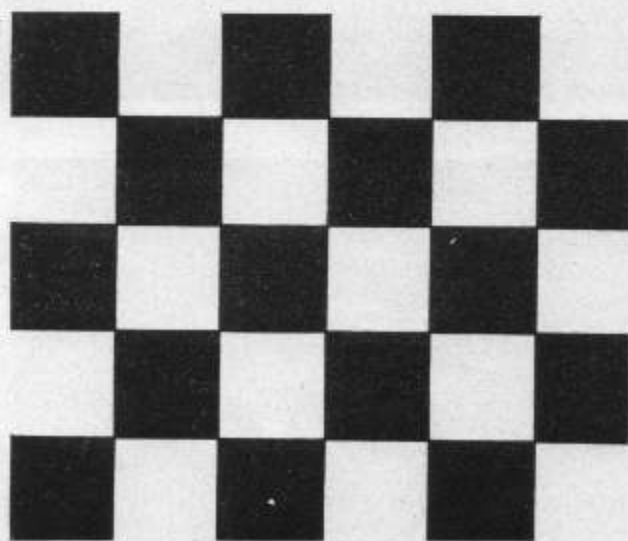


YOUR first impression of the Broadspeed G.T. depends on which end of it you happen to be standing at the time. From the front, it looks very little different from a Mini (which isn't really very surprising when you come to think about it) and from the back—well, it looks a bit like a Ferrari which has been left out in the rain all night, and shrunk. This, roughly speaking, is because the front IS a Mini, more or less, and the back is the bit which is extensively restyled—and then some—from about the centre door-pillar onwards. Obviously this is only half the story, and in fact there are several alterations to the front end which don't strike you unless you happen to see the car alongside an ordinary Mini.

All that is from the outside: inside the car there isn't much Mini—in fact, apart from the sliding windows and the door handles you'd be hard pressed to tell what sort of car they had taken as a basis. There are somewhat plush black carpets (and now full interior trim to match, although this wasn't fitted on our test car) and enough instruments to satisfy anyone, with a panel of matching switches and the like. Rubbish bins and ashtrays live in the door pockets, there are reclining seats and a tinted rear window on the test car: the exact specification depends largely on the customer, since Broadspeeds aren't turned out by the thousand to any set pattern. Apart from the basic range, depending on how much you want to spend, all manner of extras can be fitted to your taste and at your expense, and the standard specification can be switched about to suit you—at no extra charge unless you want a gold-plated gear knob, or something equally dotty. For instance, if you don't like the switch panel on the dashboard (and we didn't, 'cos we reckoned the switches were too far away, and virtually unidentifiable) Ralph Broad will mount them in

FEATURE ROAD TEST

BROADSPEED GT 2 + 2

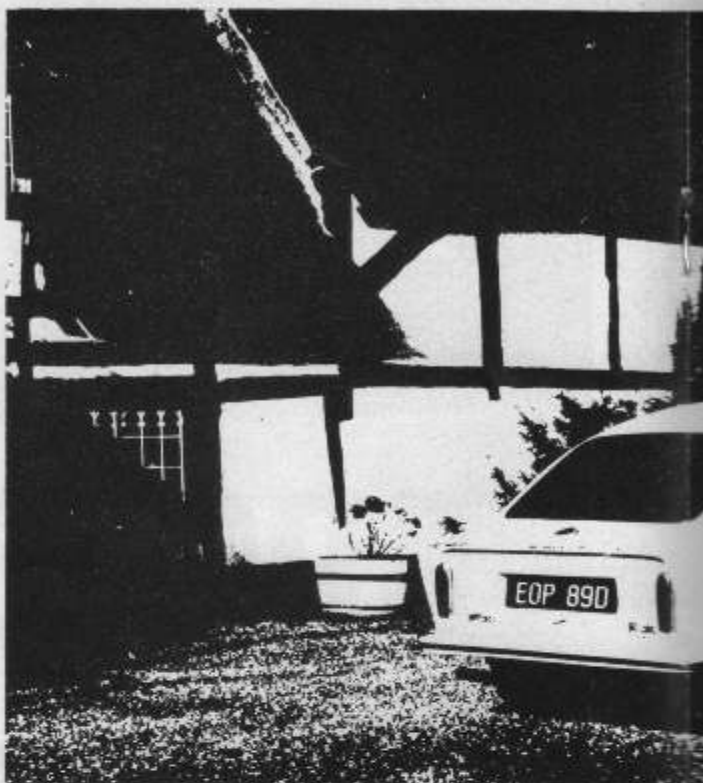


It's a WINNER!

the door pocket, or where you like, at no extra cost. This is, in fact, a full-scale conversion rather than a completely new car.

To make a Broadspeed G.T. of the type we had—the Super de-luxe, which would set you back around fifteen hundred quid or so—you first of all take a 1275 Mini Cooper "S". Out of this you take the engine, the windows and the doors and while you are bringing the engine up to Broadspeed Stage 111 specification (the "Hundred Pound Tune") with your other hand you attack the body. First of all the roof is cut at about its halfway mark, and with the back half you remove the boot, lid and all the back end bits and pieces. You chop a bit out of the pillars to lower the roof line, and at the same time you increase the rake of the windscreen, and remove all the "raised seams" on the front of the car. Then you fit the G.T. fast-back semi-body (glass-fibre, which saves weight), which fits in so neatly that you literally can't tell where one begins and the other finishes. You put in special windows to fit the new apertures, a special back seat which is properly shaped for this sort of motor-car, and which has a fold-down back-rest to provide access to the inside of the boot. Interior silent travel is fitted throughout.

Then you lower the suspension in the usual way and, in the Broadspeed fashion, you fit such refinements as taper-roller bearings in the back hubs, which eliminates, or at least postpones, the bearing failure which can be common and frequent if you persistently use high cornering speeds with the standard bearings. The finished product is five inches lower than a Mini, and of course the trad rear anti-roll bar is fitted.





Meanwhile, back at Uncle Ralph's special engine ranch, things have been Going On with the power unit. The head is modified, the inlet ports and tracts enlarged and polished, the combustion chambers recontoured to Broadspeed racing spec and the head machined and surface-ground to give a compression ratio of 10-5 to 1. Two modified 1½ in. H4 S.U.'s are fitted on a special inlet manifold, and a special exhaust manifold is fitted. The camshaft is changed for a Broadspeed "Road-race" pattern, and oil seals are fitted in the valve guides, which apart from anything else drastically cuts down the otherwise high oil consumption which the "S" engine tends to suffer from. An oil cooler and twin exhausts complete it. "Our" car also had Minilite 4½ mag wheels with standard SP41 tyres on them, and a modified front grille to incorporate twin fog/spot lamps in a neat flush fitting. Add a large-size racing filler cap, twin fuel tanks to give a total capacity of eleven gallons, an oil cooler, a highly-chromed rocker cover, chrome on the dynamo and so on to give a very smart under-bonnet look and a couple of Broadspeed G.T. flashes front and rear and lo and behold, we're in business. The standard of finish is more than good—it's magnificent, although you'd expect that from Broadspeed.

Inside the car we get a full headlining of course, and in "ours" a pair of Restall reclining seats, a Paddy Hopkirk throttle pedal extension, a headlamp flasher, all-black and very grand touring upholstery and trim, a tinted rear window and opening rear windows (front hinged, of course), a completely new facia, and built-in reversing lights.

The new facia provides a small lidless glove compartment, a central instrument panel which contains fuel, water



temperature and oil pressure gauges, an ammeter and a cigar lighter: it also takes the wireless if you have one. Immediately in front of the driver are a 150 m.p.h. speedometer and a matching rev-counter, and on the right is an impressive switch panel which provides all the knobs and switches for fog and spot lamps, screen washers and wipers, panel lights, head and side lights, interior light and the ignition/starter switch. There is a small-diameter, leather-covered wheel on the lowered-in-the-usual-way steering column.

When we tested a Broadspeed Stage 111 Cooper "S" some time ago we very nearly frightened ourselves—1275 Coopers in this state of tune are definitely not toys for the beginner, and the Broadspeed behaves in a similar manner except that it goes faster. So that stuffing the boot in the carburetors in the traditional Mini fashion is an exercise to be contemplated with some thought and care. The SP41's cope pretty well but this is not an easy car to get off the line in a hurry without leaving a good percentage of the rubber on the road, and in the wet spinning wheels tend to be the rule rather than the exception unless you lighten the heavy foot a shade.

Despite the considerable urge that is being extracted from it, the engine isn't in any way temperamental. During the test period (a nice resounding phrase if ever we heard one) it was always a first-time starter, ticked over reliably and fairly evenly, at about seven hundred revs, and at the other end of the scale felt in no way strained when whizzing round at seven-five. It isn't the quietest of units, naturally: it is set up pretty slack, like most highly-tuned units, and although the level of mechanical noise isn't too high at low-to-moderate speeds, once the revs go up to above five thousand it all gets pretty lively, and the driver and passengers are left in no doubt that something is happening downstairs under the olde bonnet. From outside, however, the exhaust note is quiet and unassuming, and from the noise point of view there is no reason why it should attract crowds wherever it goes. So it must be the appearance.

When they called it a two-plus-two, they were just about right, and no one wants to go running away with the idea that this is a full four-seater, 'cos it ain't. The rear seats will accommodate one adult for short journeys or two children, for whom there is plenty of leg and head-room. Of course, if you want to get at the boot for any purpose they all have to get out, and the first modification we should like to see on this tremendous little car is the provision of an outside boot-lid. This wouldn't be easy because of the "spoiler" fin on the tail, which may be a bit unnecessary on the road version but which, on the racer with a top whack of something like 145 m.p.h., they say, it obviously has a part to play.

With a car like this performance is everything, of course. And from this point of view, as well as a good many others, the Broadspeed G.T. certainly has everything. We were pretty shaken by the performance figures we got off the ordinary Broadspeed 1275 Cooper "S", and so that although we were not exactly unprepared for the thing to go like sand off an agricultural implement (well—you know what we mean) we realised that we had forgotten exactly what this sort of performance was like in a little car. The test car had only covered about fifteen hundred miles when got it, so it was pretty stiff and barely run-in, and the gear-box was more than stiff. Even so, it was doing well over the ton by the time half-a-minute had gone by from a standing start: from rest to 100 takes 26 seconds or so, and 0-60 wants 8.3 seconds. If that isn't enough you can get to the Fraser limit in eleven seconds. Top speed? Broadspeed are going to sell this car with a guaranteed 120 m.p.h. on tap, and the test car romped up to 124 m.p.h. exactly, both

ways and no nonsense. It might have gone faster still, but this represents seven-four in top gear, and The Man at Broadspeed said not to go over seven-five. So we didn't. At this sort of speed, which is as quick as anyone is likely to go in a Mini on the road, the car is absolutely rock-steady and goes straight as a dart. The only snag is that it isn't too comfortable because the suspension, treated though it is, is still basically Mini, and if the road surface isn't like a billiard table the body is going up and down at a pretty high frequency. There's nothing harsh about it, and your false teeth would be perfectly safe, but the motion is definitely there.

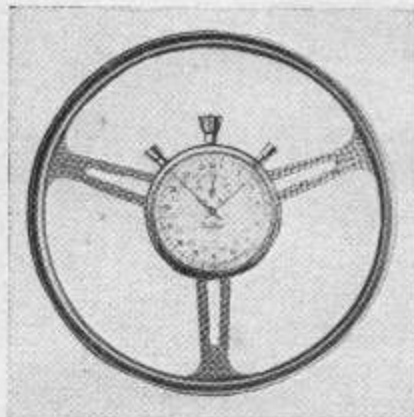
It's well worth a firm sort of ride, though to get road-holding which measures up to this sort of performance. We have, apart from an extensive road mileage, also thrashed the same car round Silverstone and its handling and cornering under both conditions are pretty near faultless. They would be perfect except that the test car was running with an experimental degree of negative camber on the front wheels which gave it an oversteering characteristic with the power off, and we don't just mean that if you lift your foot the tail comes round. That is normal Mini behaviour, this oversteer wasn't. But the experimental settings aren't standard and normally the car handles like an extremely fast Mini. By the same token, once you had got used to the unusual behaviour, there still wasn't a lot on the road to keep up with the Broadspeed, and practically nothing to pass it, seventy limit or no seventy limit.

Cruising speed? Well, the dreaded legal seventy is only about three-five on the clock, so the engine is hardly doing any work at all, relatively speaking. At this speed it is dead smooth, acceptably quiet and really very pleasant. Except that with this much power under the trotter it is damn difficult to keep it down to seventy, and the day we were followed up the M1 by a gentleman in a blue uniform will stick in our memory as being the time we used up all our self-control.

A car that goes as well as this also needs to be able to stop, and this is taken care of by the standard Cooper "S" disc/drum braking system, with a servo of course, but with competition-type pads and linings. Result—no fade, no uneven pulling, no nothing except reliable and very rapid stopping.

As we said earlier, there were one or two points about the car which didn't suit us personally. Since Ralph Broad will put most of them right without a murmur it isn't easy to be critical, but for what it's worth we will mention them. First, the switches: with the best use for our five-foot-nine being made of the reclining bucket seat it was an elluva long reach to turn on the wipers, and we would have preferred to see them in the door pocket. Then the rear-view mirror: placed where it was, it produced the view through the top half of the steeply-raked rear window, where the distortion was greatest. We didn't much care for the difficulty of getting in and out of the driver's seat and finally we found a snag to the removal of the seams on the front of the body. This alone is worth a few miles per hour, and gets rid of a good part of the wind noise, so it is obviously worth doing. But in wet weather there is nothing to stop the water cleared off the screen by the wipers from creeping round the pillar and shooting in through the open side-window—straight into the driver's handsome visage, or whatever. Which is nasty, but there you are.

In spite of these points, none of which can exactly be called major criticisms, we thought the Broadspeed G.T. was fabulous—the most fun you can have on four wheels without actually laughing! The whole thing adds £720 or so to Cooper "S" prices, making a total as we tested the car of £1,497.



BROADSPEED

GT 2 + 2

SUPER DE LUXE



PERFORMANCE PANEL

Make: BROADSPEED

Model: GT 2 + 2

ENGINE

Starting:	Excellent
Idling:	Good
Flexibility:	Good
Vibration:	Average

TRANSMISSION

Clutch:	Good
Gear Ratios:	Good
Synchromesh:	Good
Gear Change:	Good
Gearbox Noise:	Nil
Final Drive Ratio:	3.44
Rear Axle Noise:	n/a

SUSPENSION

Roadholding:	Average (see text)
Roll Stiffness:	Good
Ride:	Average
Traction:	Average
Ground Clearance:	Satisfactory

Engine: Four cylinders, as standard Cooper "S" 1275 except for modified cylinder head, with larger inlet valves, ports and tracts; polished ports; recontoured combustion chambers; compression ratio 10.5 to 1; modified inlet and exhaust manifolds; twin 1½ in. H4 S.U. carburetors; Broadspeed "Road/Race" camshaft; oil cooler; twin exhaust system.

Transmission: As standard 1275 Cooper "S".

Suspension: Lowered all-round by 1½ in.; taper roller bearings in rear hubs; rear anti-roll bar; Minilite mag alloy wheels 4.50 x 10.

Brakes: As standard Cooper "S" 1275, with servo.

Dimensions: As standard Mini-Cooper "S" except height, 4 ft. 0 in.; length, 10 ft. 8 in.; weight, 12½ cwt.

Equipment on Test Car: Twin fuel tanks; headlamp flasher; map-reading lamp; two-level instrument lighting; built-in reversing lights; electric clock; cigar lighter; air horns; leather-covered steering wheel; Restall reclining front seats; fog/spot lamps; separate park/side lights; chrome-plated; re-raked gear-lever; throttle pedal extension; Broadspeed Stage III conversion with oil cooler; anti-lift screen wiper blades.

PERFORMANCE

MAXIMUM SPEED	m.p.h.
Mean of two ways	124
SPEEDS IN GEARS:	
First	34
Second	58
Third	81

STEERING

Ratio:	Average
Kick Back:	Average
Caster:	Average
Direction:	Good
Lock:	Average

BRAKES

Fade:	None
Pedal Pressure:	Average (servo fitted)
Response:	Good
Balance:	Good
Handbrake—position:	Between seats
—action:	Good

BODY

Finish—exterior:	Excellent
—interior:	Good
Sound Level:	Good
Weatherproof:	Excellent
Entrance—front:	Average
—rear:	Good
Front seat—comfort:	Excellent
—legroom:	Excellent

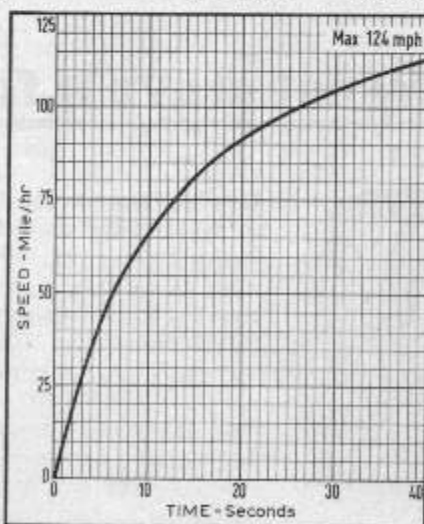
Rear seat—comfort:	Average
—legroom:	Poor
Driving position:	Good
Headroom—front:	Average
—rear:	Average
Boot:	Poor
Other storage space:	Good
Ventilation:	Good
Visibility:	Good
Heating:	Average
Instruments:	Excellent
Minor Controls:	Excellent

ELECTRICS

Headlights:	Excellent
Other Lights:	Excellent
Windscreen Wiper:	Good

SERVICE

Frequency:	As Mini Cooper "S"
Accessibility—plugs:	Good
—spare wheel:	Poor
—battery:	Poor
—radiator:	Good
—dip stick:	Excellent



Car converted by: Broadspeed Engineering Ltd., 101 Stratford Road, Birmingham 11.
 Cost as tested: Engine, £100; bodywork conversion and accessories, £620; complete car as tested, £1,497. Cheaper versions available.