

September 1994

Construction gang

52. PERFORMING FLEA — Casal's new Magnum 50: cheap and cheerful with a 64mph top speed as standard. Reminds me of when I were a lad on me Garelli. If mopeds were allowed to be this fast the anti-motorcycling lobby would cack its pants. But at least biking would be more attractive to the young 'uns. Spotty little buggers.



...pared on
 p. 44. Right: all we can say
 is there are no ropes
 involved and Kevin didn't
 mean to do it — p. 52.
 Left: who are these men,

When you've ridden full power ZZ-R1100s, done 180mph and had your fill of a Bimota, there's only one thing left to try. The Casal Magnum 50.

PERFORMING FLEA

Ye Gods. Prepare to recalibrate your brain. Riding a 50cc motorcycle takes you into a bizarre world of one-position throttles, 49 inch wheelbases and total reliance on other traffic not killing you.

I have to admit that the first three yards came as a bit of a shock. Pressing the starter button produced a mild bleating noise followed by a gentle crackle of exhaust. It's so low key you instinctively blip the throttle just to make sure it won't go away. When you actually put some load on the engine you discover, to your horror, that the needle's on the 8,000rpm redline before the clutch is fully out.

This isn't abuse. It's necessary. The gentlest possible getaway needs 8,000, and in fact all the power's between 8 and 9,250rpm. The engine will pootle the bike along below these revs but I can't see what you'd do with the performance, unless you count mole baiting with sharpened bamboo sticks.

Casal have been making mopeds in Portugal for 30 years but for the last 15 or so no one's imported them into the UK. We last tested one in July 1975 when, in a terminally uninteresting, seven-way group test that excluded the legendary FS1E and SS50 Honda, the Casal SS4 did

Right: Portugal has the best seafood between here and Newfoundland and a moped factory that, according to Casal importer Wayne Mitchell, holds the 50cc world speed record at 140something. It's the first reasonably-priced new moped for years but the premix fuel is a downer. Who wants to carry an oily bottle and measuring cylinder up their jumper every day?

47mph in a strong crosswind (third best) and cost a measly £215. The then editor described it as a tourer and was shot shortly afterwards.

These days most people would agree the Casal Magnum is a moped, though in the de-restricted form you see here it's a motorcycle, legal only for 17-year-olds and above. And it's quite quick. It gives a restricted NSR125R a hard time up to 50mph and powers out of 35mph corners like a real bike. It's still a gas in 50mph bends, if a lot more knife-edge than usual because, with just 7.5bhp, you're already flat out on the way in.



Pics: Kenneth Pollinator

The indicated 110km/h @ 9,500rpm top speed on the flat is 63.5 radar-certified mph. Down a hill with a half ton electromagnet at the bottom it can reach 9,600 and 125km/h, which might be a genuine 66. It's the fastest standard 50 we've tested — nearly as quick as most Japanese 100s and some of the more turgid 125s. It's good power too, with an easily-felt peak and the option to over-rev a couple of hundred rpm — something you'll appreciate if you've ridden an artificially-strangled engine.

What you'd use this 150bhp/litre performance for depends on how much trust you have in your fellow road users. Going to work on quiet roads or in city traffic would be no problem. Chasing lorries on busy dual carriageways, as Kevin Smith did from Corby to Northampton — well, rather you than me, Kev.

The motor itself is absolutely oil tight, but the back of the gearbox is permanently decorated by premix that's oozed out of the 21mm Bing carb. There's only a cork gasket and spring clip holding the float bowl on, something I discovered when, after 300km, the throttle response became 'orrible, with a jerky pickup and no mid range. It turned out to be tank rust and paint partially blocking the main jet, so an inline fuel filter is essential.

Left: 64mph ain't ideal but it gives you a sporting chance of staying alive. Riding a restricted moped in today's traffic is so dodgy there ought to be a law against it. Sadly there's a law for it.





This is the moment
just after Kevin's
contact lens fell out.
How we laughed when
we found it under the
front tyre.

PERFORMING FLEA

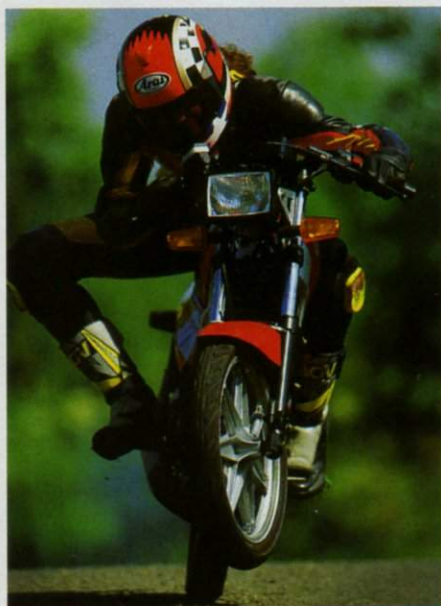
The gearbox is very notchy in the top three ratios, leading to some spectacular missed changes until you get used to it. To get a clean shift you have to move your whole leg from the hip: an ankle swivel won't do. It's as much a product of the riding position as the gearbox. If the seat allowed your bum to move back six inches it'd not be a problem. Pass me that electric carving knife, Delia.

In fact vandalising the seat would work wonders for the whole bike. The footrests and handlebars are OK but the seat shoves you so far forward it inhibits control and comfort, especially in corners where you badly want to get some weight off the front end. It also makes it harder to do wheelies. Perhaps it's an attempt to get decent passenger space on a short bike. Well bugger that — learners aren't allowed to carry passengers in the UK.

Ride quality is as good as a ZXR400's up to the Casal's humble top speed. The forks strike a particularly good balance between comfort and control, and feel superb under braking. The four-way compression damping adjusters are a bit over the top: they're covered in oil mist and anyway they're fine on #1 (softest).

The rear is excellent for absorbing bumps but worryingly under-damped for flat-out cornering. I did not enjoy flicking the Casal through an 80mph kink at 55 and feeling the back end yawing around. I can only hope our bike had a faulty shock. It certainly had a few other niggly problems. This is my biggest reservation with the bike: it's cheap but, with most of the bike made in house, quality is not good.

There's nowt wrong with the Yamaha



Above: lots of people expressed doubt about the engine's longevity, but it's less highly tuned than the old TZR250 and feels pretty damn bulletproof. I'm not so sure about the electrics and detail finish.

indicators, solid sidestand with a decent load bearing area (strange how a little Portuguese moped can get this right and last month's £21,000 Bimota can't) and even (in the dry at least) the never-seen-'em-before, French-made Hutchinson tyres.

The brakes are excellent too, exactly matching the short wheelbase chassis' needs. But the rear adjuster nut vibrated off and the front disc developed a judder after 250km. Two dull patches, either thinner or thicker than the rest of the disc swept area, suggested a material fault.

More trub came from the steel tank banging against the top frame rails over bumps; the tail light blowing both filaments and only the brake light working when I put a new one in; the stiff, primitive locks; and the steering lock being assembled back to front at the factory. Worst of all, there's no neck in the fuel filler hole and if you splosh in the full 14 litres (or even 12), petrol spills out of the filler cap under braking and acceleration.

What I'm trying to say is, if you buy a Casal:

- install an inline paper filter to keep the tank crud out of the carb
- sort the electrics: get some high quality bullet connectors, insulators and crimping pliers from Merv Plastics (0602 222783) to stave off the inevitable winter electrical misery
- keep it well looked after
- make sure you don't mind using premix

Which brings us to who would buy a one. After years of decline mopeds are a growing market, though no one knows why. This one's fairly cheap and very fast. But you still have to want a 50cc bike. One obvious target group is 16-year-olds and they're supposed to ride restricted versions. As all restricted 50s do about 30mph the cheapest one is the best, which happens to be Kawasaki's £1,250 AR50 — £250 less than the Casal.

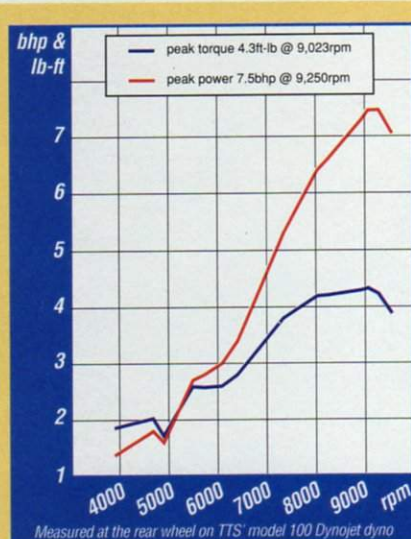
If you want full power, it's different. The Casal is extremely easy to de-restrict (just open out the reed valve stops), while it'd cost you £200 or more to get an AR50 up to about 50mph*. The trouble is, when you become eligible to ride a full-power moped at 17 you can also ride a 125. Even if you take a moped test at 16, throw away your L-plates and acquire a Full Moped Licence (yes, you can do this) you still can't legally de-restrict the engine. The Casal therefore looks best value as a bike you keep after your 17th birthday, or as a moped you buy when you're 16 and de-restrict because you want to live to be 17, invalidated insurance or no.

The only other mopeds in the frame are Cagiva's Prima (£2,115, 49mph) and Aprilia's AF1 50 (£2,395 and a claimed 65mph).

No contest. The Portuguese missile smokes 'em. If I were an acne-ridden 16-year-old again I'd dream about having one.

Rupert Paul

*at Kawasaki Peterborough, fastest AR50 tuners in the country (0733 341003). Includes AR80 exhaust, sprockets, porting, skimming and gaskets.



Casal are the only factory who claim less power than we measure — 7.3bhp against the stunning 7.5bhp we saw at TTS. At only 150bhp/litre there's plenty of scope for tuning.

Casal Magnum 50

Price, colour options £1,585 on the road, red/silver, silver/black, black/silver
Warranty 6 months, 6,000 miles
Importer Porto Sport Ltd., 5 Riverside Court, Calver Rd., Baslow, Derbys DE45 1RD (0246 583862).

Engine

Type watercooled two stroke single
Bore x stroke, capacity 40 x 39.7mm, 49.4cc
Compression ratio 8.3:1
Fuel system 21mm Bing carb, 30:1 premix
Redline 8,000rpm (hat)

Transmission

Primary drive, ratio gear, 1.389
Final drive, ratio non-o-ring chain, 13/42

Chassis

Frame type steel beams
Tyres Hutchinson 2.75-16 and 3.00-17
Front brake 210mm disc, 2-pot Grimeca caliper
Rear brake twin leading shoe drum
Front suspension 30mm tele forks, 4-way comp. damping
Rear suspension single shock cantilever

Dimensions

Wheelbase 1245mm (49in)
Seat height 787mm (31in)
Dry weight 89kg (196lb)
Fuel capacity 14L (3.1gal)

Tester's verdict

Good points full power performance, forks, braking, ease of de-restriction
Bad points riding position, build quality, rear shock, premix
Performance arm-stretching (relatively speaking)
Comfort irrelevant
Braking excellent
Handling badly needs more rear rebound damping
Value if you want a fast 50, this is the one

Quick comparison

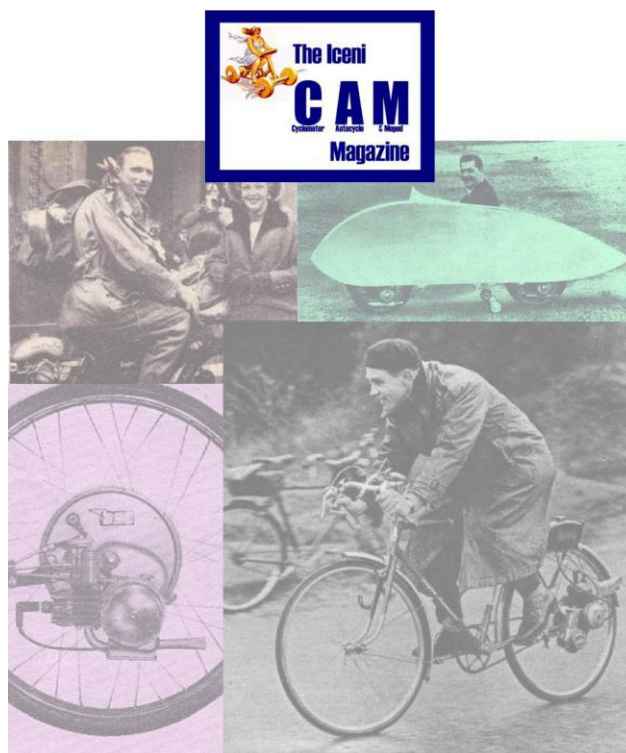
bike	derest. top spd	ease of derest.	price	issue
Casal	64mph	easy	£1500	bzzzz
AR50	c.55mph	hard	£1250	May 81
AF1 50	65mph*	dealer	£2395	nope
Prima 50	49mph	easy	£2115	Sep 92

*Aprilia's claimed figure

Performance

Max speed prone 63.5mph
Upright 62.0mph
SS 1/4 mile long time
Av. fuel cons. 48mpg

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