

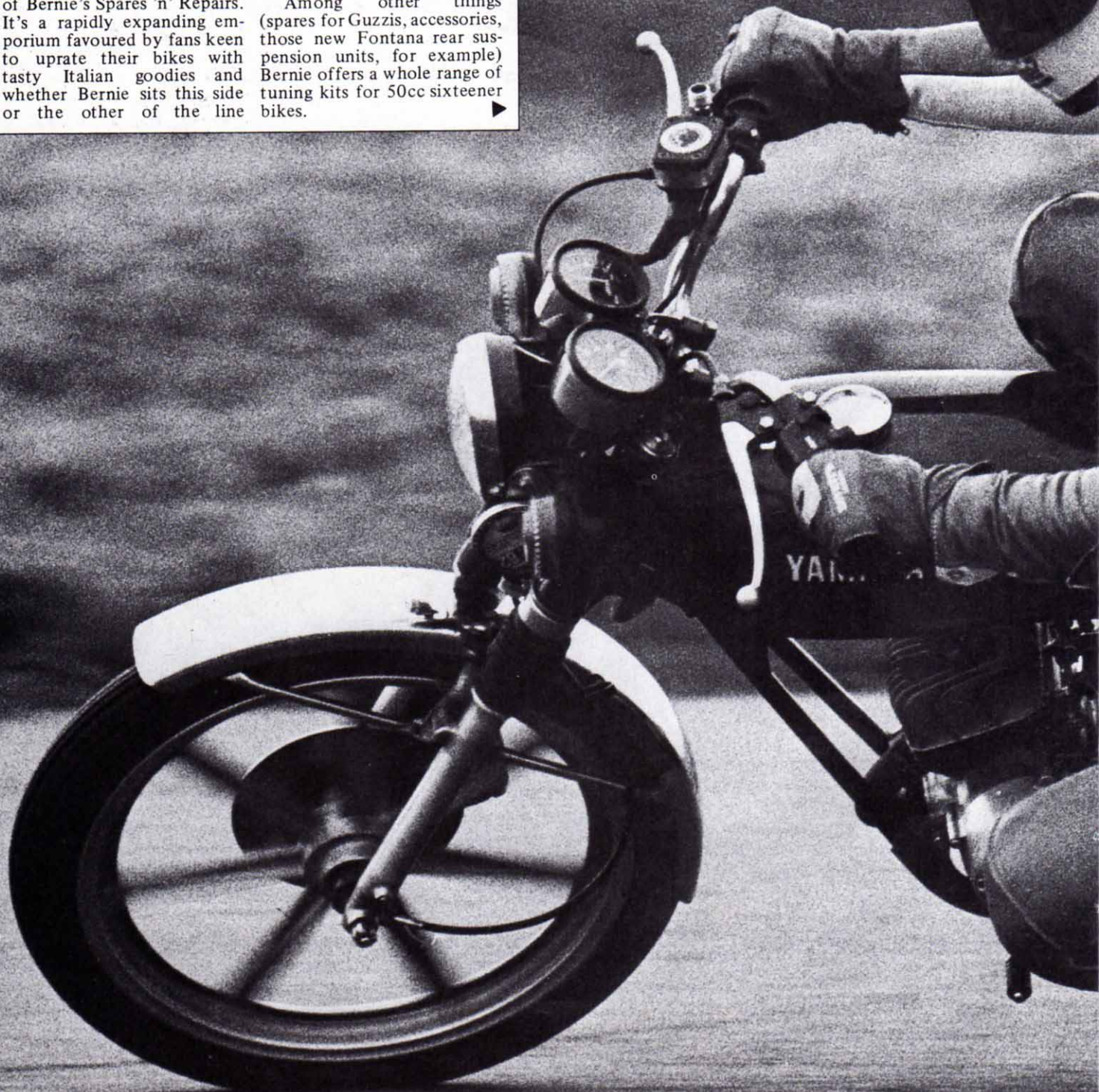
HOT STUFF FROM WATFORD

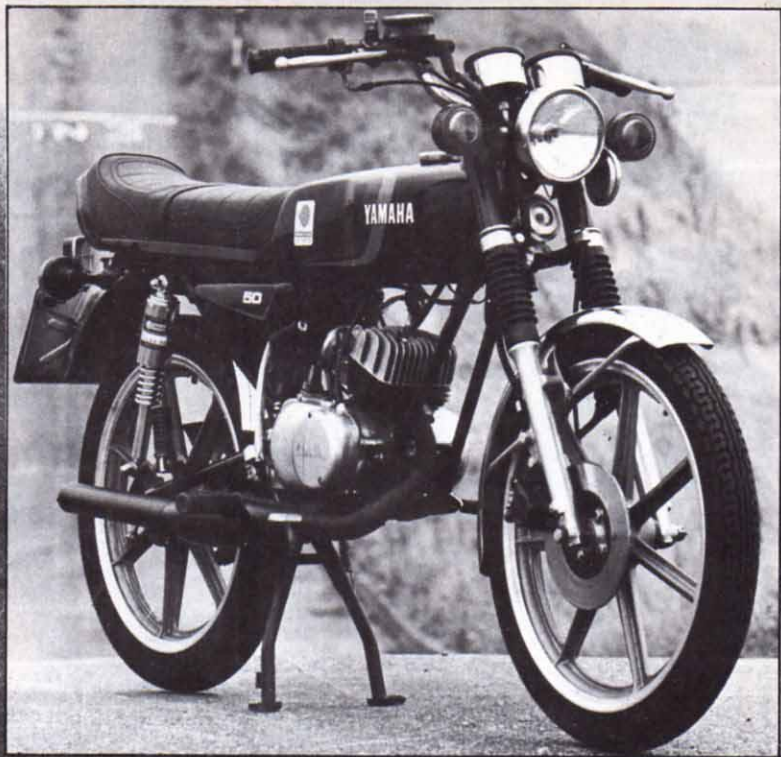
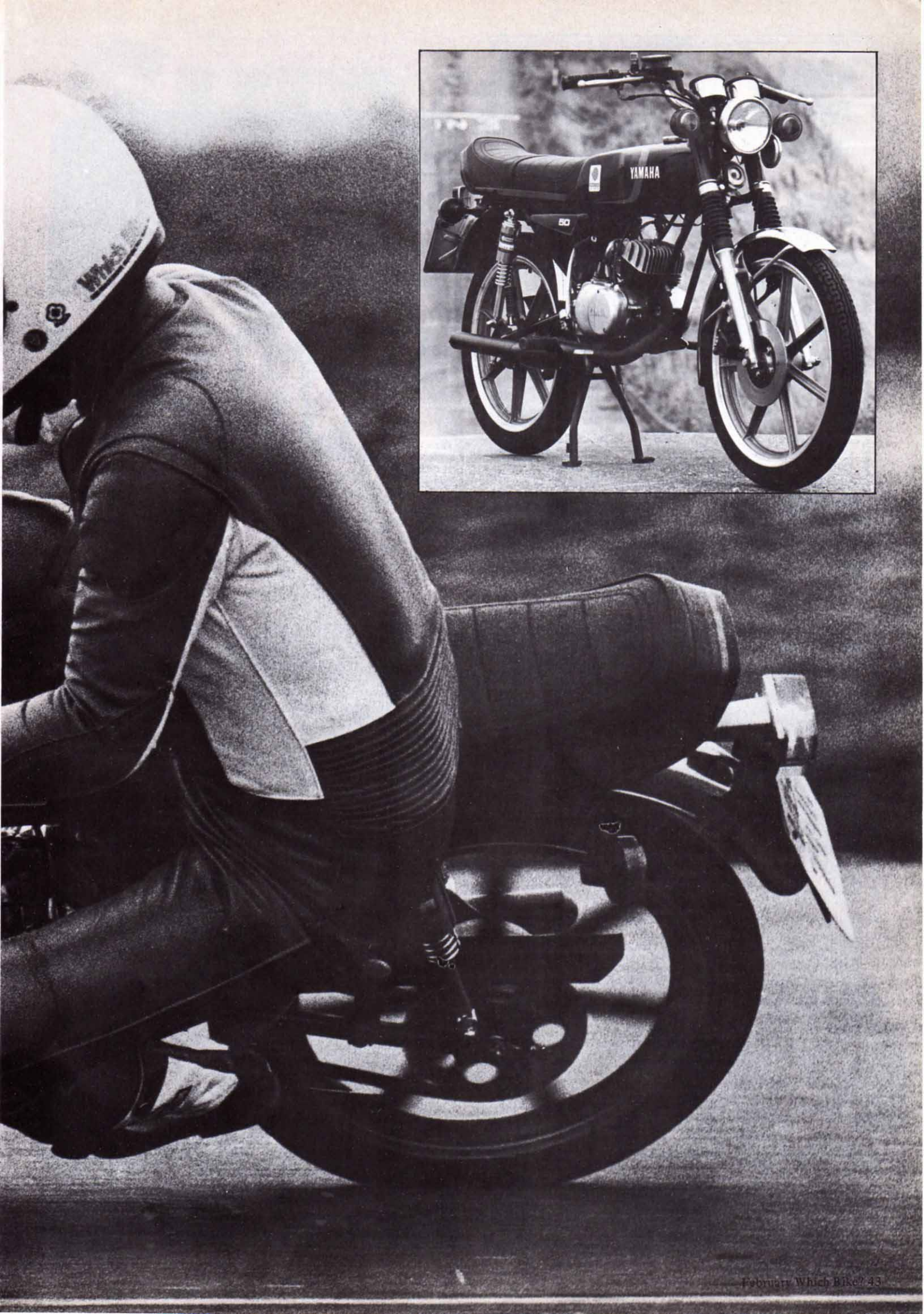
Taking a tuned RD50 Yamaha to the limit... almost

Anyone who's ever told you that civilisation stops at Watford has probably never heard of Bernie's Spares 'n' Repairs. It's a rapidly expanding emporium favoured by fans keen to uprate their bikes with tasty Italian goodies and whether Bernie sits this side or the other of the line

is a matter of debate, depending, of course, how you view the goodies he supplies.

Among other things (spares for Guzzis, accessories, those new Fontana rear suspension units, for example) Bernie offers a whole range of tuning kits for 50cc sixteener bikes. ▶





Please send me
 High performance pipes
 for my plus £2.50 p&p.
 at £ enclose cheque/cash/PO No.

Name _____
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Replacement hyperperformance pipes

Tested by
**MOTORCYCLE
 MECHANICS** Magazine
 in the April issue

... add b.h.p.

YAMAHA		
	Matt	Chrome
NEW for LIQUID COOLED 250 & 350CL		
RD125/200	£58.08	£71.30
RD250/350	£65.55	£80.50
RD400	£65.55	£80.50
RD250E	£65.55	£80.50
RD400E	£65.66	£80.50

SUZUKI		
	M/Black	Chrome
*GT 750	£124.20	£143.75
GT 500	£62.10	£77.63
GT 250	£80.28	£96.75
250 X71X5	£58.08	£72.45
GT 185	£58.08	£72.45

"an increase in maximum power from 31 bhp to 36 bhp!"
 "when revs reach 5,500 the power comes in with a smack."

Kawasaki		
	M/Black	Chrome
*KH 250	£75.90	£94.30
KH 400	£102.93	£130.53
*KH 500	£102.93	£130.53
H1B 500	£78.20	£96.80

TRADE Enquiries Welcome
 *All three cylinder systems are 3 into 3.
 Prices inc. V.A.T. — Post & Pack. £2.50

Dept WB
 26 28 PRETORIA ROAD ROMFORD ESSEX
 TELEPHONE (0708) 47375

ALLSPEED MANUFACTURING

GOOD NEWS FOR 50cc OWNERS!

These kits have been developed specially for you the seventeen year old when you find yourself trapped with a restricted moped which you probably cannot afford to change even though the law allows you to ride a more powerful machine. It gives valuable experience of controlling a machine at speeds similar to a small motorcycle whilst riding a bike which is familiar to you. Then you can safely progress to a larger machine.

There are no exchange items so you can retain the original parts, and offer the machine as a restricted moped or a small motor cycle when you wish to sell. If you are thinking of buying a new restricted 50cc why not have the kit with the machine? Your dealer can supply it and add the cost to the original finance agreement. He will then fit it for you on your seventeenth birthday. Take this advert along to him — we deliver within 24 hrs of receipt of order!

SUZUKI GT
 91% increase in speed, 207% increase in power output.
 Kit consists of:
 Special cylinder barrel. 75cc. Copper nickelchromium molybdenum alloy piston with one cast iron ring. Gudgeon pin and circlips. Cylinder head and base gaskets. 20 M/M Dellorto carburettor with manifold, fixing screws and gasket. 14 T Engine sprocket. Expansion chamber ex system with silencer. *£92.00

YAMAHA RD
 92% increase in speed, 166% increase in power output. Kit consists of:
 Special cylinder barrel 50cc. Copper nickelchromium molybdenum alloy piston with gudgeon pin rings and circlips. High base gaskets. 19 M/M Dellorto carburettor with manifold and expansion chamber. *£92.00.

YAMAHA TY/DT
 Performance and component details as RD kit above. Individual spares available or part kits available.
 Barrel and Piston *£35.00
 Cylinder Head *£14.00
 Carburettor 19 M/M *£22.00
 Carburettor 22 M/M *£30.00
 Expansion Chamber *£25.00

No warranty of increased performance can be given when only part of a kit is fitted.

It is illegal to fit and use this kit before you are seventeen, except when used off the public road. When you are seventeen you must inform the local tax office where you send your road fund licence fee that you have converted to a motor cycle, also your insurance company must be told.
 *All prices inc. VAT and carriage to your door.

SPARES 'N' REPAIRS

52 Woodford Road, Watford, Herts. WD1 1PA.
 Telephone: Watford (0923) 32748

Trade enquiries welcome

FUEL ALARM
 A new device that fits easily and quickly into existing fuel lines. It gives an audible warning when the fuel tap is left off and just before reserve is required. This unique aid to safety is available direct from the manufacturers for £9.50 postpaid. Designed to fit all machines.

BATTERY ELIMINATOR
 An electronic device that allows either six or twelve volt machines to operate without their battery. It saves money, space and weight. £6.50 postpaid.

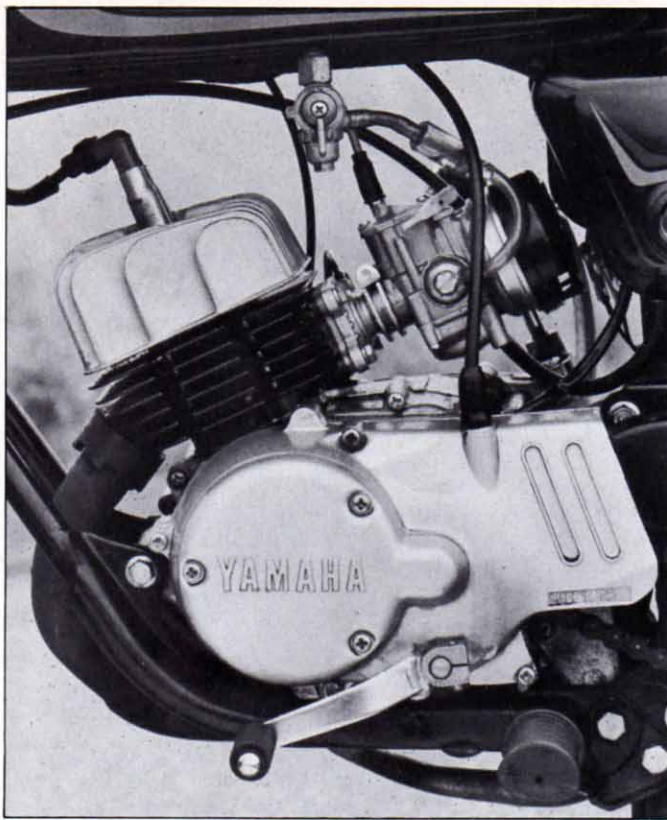
PANNIERS ONLY
£37.50 pair
 16"x15"x6"
 Lockable, universal fittings for machines above 200cc and available in black only only. £37.50 postpaid.

FMC sell motorcycle components by mail order only. SAE for full product range. State m/c when ordering, full refund if not delighted. Cheques, POs to FMC, 133a High St, Acton, London W3.

DO YOU NEED ANY BITS?

Which Bits?

ON PAGE 72



It doesn't take much to spot the difference, the Italian carb is a bit of a give away. But we haven't finished yet!

Now you might say that this particular activity is illegal in the extreme. After all, if you're still under 17 then your bike must be restricted in performance and if you tune it at all then you're breaking the law. On the other hand, once you pass the magic date then the sky's the limit and there's no way you can be stopped from playing with some go-faster parts.

We'd heard stories and met some riders at the Banstead GP circuit who would swear blind that their 50cc machines would clock 70mph on the flat. So we felt that the RD50 Yamaha we had residing under wraps was ripe for a shot in the arm. We'd found that the RD handled better than most, had good brakes and tyres but, with a top speed of 35mph, was hardly reaching the limits of the chassis. Would, we conjectured, the limit be at 70mph?

The kits supplied by Bernie's come from Malossi in Bologna. They contain a new barrel, cylinder head and piston, plus an expansion chamber exhaust pipe, a bigger Dellorto carburettor and a reed-valve chamber. The whole kit costs £92 including VAT and takes about an hour to fit if you know what you're doing. Since the *Which Bike?* team rarely know what they're doing outside the pub, they threw caution to the winds and got Bernie's to do the job themselves.

As supplied, the Yamaha

pumps out a staggering three horsepower, or about the same thrust as several thousand frogs breaking wind in unison. It's not much, especially when you're trying to out-drag a milk float from the traffic lights. The Malossi kit uses a deeper breathing 19mm choke carb and a higher 11:1 compression ratio that takes the maximum power up to about 7.9 horsepower, or, as the tweak sheet says, 'aumento di potenza del 166%' - which in English means the power is upped by 166 per cent. The sheet also claims an 'incremento di velocita del 100%', meaning it's doubled. Heck, that's the magic 70mph we'd heard about!

We had to admit to being sceptical, however. For a start, no changes to the gear ratios were made to the bike when the kit was fitted, and a few mental calculations (after all, we do have *Personal Computer World* in the next office) suggested that at 70mph the engine would be buzzing to over 15,000rpm which, even for a little 50, seemed optimistic. And on the road that's the way it turned out. The power comes on like an LC Yamaha twin, with precious little below 7,000rpm and an avalanche of power (well almost) above that, tailing off at 9,500rpm. The problem is that unlike an LC, which does at least have some power at the bottom end, the Malossi-tweaked RD50 has next to nothing, and so buzzing away from traffic lights means a lot of

clutch slipping. It also means a lot of noise. Most of it comes from the unsilenced intake to the carb and, cruising at 45mph, you vary the sound from the wail of strangled tomcats to a deep foghorn note.

In practice, the bike is still civilised. The oil injection is retained, with the feed to the reed-valve chamber next to the carb, and starting is reliable with a toggle-type choke lever on the carb body. The only attention needed was to re-torque the 10mm cylinder head nuts after the running-in period. Overall fuel consumption of 76.4mpg was far better than expected. That's better than the restricted AR50 Kawasaki and about the same as an AR80.

Just to make sure of the top speed, we took the RD50 to MIRA for checking on the timing strip. That day, there was a 15mph wind along the strip, but surprisingly the RD pulled over 47mph into the wind. Because of the still-low gearing it wouldn't go above 50.43mph with the wind assisting - hardly surprising as the bike was revving at 10,500rpm and way beyond the power peak. It was also detonating badly, which stopped us from trying for more speed.

Although the RD50 handled well in stock trim, we found that with a 50mph potential the rear shocks were inadequate. Their lack of damping allowed the rear end to pogo on bends and made the bike far from safe to ride at speed. Lucky, then, that M R Holland, the importer of S&W shocks, had just got in touch to tell us that they'd brought in a batch of shocks for lightweights. We tried a set on the RD50 and they do the job perfectly for an amazing £15 a pair. They're about an inch longer than stock, but with the porky riders around here that's just as well. The bike now corners as well as many bigger bikes.

A 50 per cent increase in top speed is nothing to sneeze at. And if you're only 17 and aren't keen to switch to a new bike, the £92 of this kit looks like a good bet. If you think that the power increase isn't worth the trouble, we asked Bernie if there was anything better. They promptly came up with a monster 22mm-choke Dellorto carb that looks like it came off an RG500. There's also the matter of upping the gearing with a 13-tooth (instead of 11) gearbox sprocket from the Yamaha spares list. Look out next month for more news of whether we can reach the elusive limit.

If you want to travel to

MODEL	Yamaha RD50M Malossi
Price inc taxes:	£437 plus £92 for conversion na
Warranty	na
ENGINE	
Type:	Reed-valve two- stroke single
Capacity:	49cc (40 x 39.7mm)
Comp ratio:	11.1
Carburation:	19mm SHB Dellorto
Ignition:	Flywheel magneto
Max power:	7.9bhp (claimed)
Max torque:	na
TRANSMISSION	
Primary drive:	Gear
Clutch:	Wet multiplate
Gearbox:	Five-speed
Final drive:	428 chain
Overall ratios:	50.8, 31.2, 22.3, 17.6 & 15.0:1
ELECTRICS	
Power source:	Alternator
Battery:	6V 4Ah
Headlamp:	6V 18/18W direct
CHASSIS	
Frame:	Semi-duplex tubular cradle
Suspension,	
front:	Telescopic fork
rear:	Swing arm with S&W damper units
Brake,	
front:	
rear:	
Tyre,	
front:	2.50-18
rear:	2.75-18
CAPACITIES	
Fuel tank:	1.76gal (8l)
Oil:	1l (1¼pt)
DIMENSIONS	
Wheelbase:	46.7in
Seat height:	31.5in
H'bar width:	26.5in
Grnd clrnce:	6in
Rake/trail:	63deg/3.5in
Dry weight:	174lb
EQUIPMENT:	
Mirror, turn signals, speedo, tachometer, seat lock, toolkit, steering lock	
Importer/ Manufacturer:	Mitsui Machinery Sales, Oakcroft Road, Chessington, Surrey/Bernie's Spares 'n' Repairs
PERFORMANCE obtained by <i>Which Bike?</i> at the MIRA proving ground.	
Mean top speed (prone):	47.73mph
Speeds in gears @ 10,000rpm:	13mph, 22mph, 31mph, 39mph & 45mph
Av fuel con- sumption:	76.4mpg
Tank range:	134 miles
the limits of civilisation, Bernie's Spares 'n' Repairs is at 52 Woodford Road, Wat- ford, Herts WD1 1PA (tel: 0923 35748) while M R Holland is somewhere in the depths of Lincolnshire at Unit 2, Wardentree Lane Industrial Estate, Spalding, Lincs (tel: 0775 66455).	
<i>John Nutting</i>	

IceniCAM Information Service



www.icenicam.org.uk