

THE ULTIMATE 500 SINGLE

Choosing a classic bike after a time away from two-wheels can be a challenge, particularly if you are also fond of tractors. John Cooper went Italian...

Photos by John Cooper

Sitting in my shed is a bright red 45 year-old tractor. It is a 1961 Massey Ferguson 35 X with a 3-cylinder diesel engine, power take-off, three point linkage, a three speed 'box with high and low ratios and a diff lock. It was the first model produced by Massey after taking over Ferguson, who had produced the loveable TE20 'Grey Fergie'

developed by the brilliant engineer, Harry Ferguson. My tractor works hard for a living, is so solidly built that nothing has yet worn out or broken, and it never fails to start. It will still be doing its job long after the current crop of Chinese 'flatpack' tractors have gone for landfill.

So what has a tractor got to do with motorcycles? Let me explain. When I decided

to return to motorcycling, I set to thinking about what kind of motorcycle I would look for. This is a surprisingly complicated and difficult task, because one's motorcycle is, among other things, a two-wheeled sartorial statement and so has to be chosen with all that that implies in mind. 'A Man in Known By His Automobile' said a poster I once had on my bedroom wall. Hmm. How much more true then for His Motorcycle.

Nearly 20 years had elapsed since I last owned a motorbike, and I only knew what I did *not* want. Anything truly vintage would be just too... umm... vintage. And anything after about 1975 would be half plastic. I was not looking for power, and so didn't want to own a Japanese crotch-rocket. I considered owning a Japanese Retro about as seriously as I have considered being an Elvis impersonator. British? The small ads are full of expensive elderly British classics,

many of which have likely suffered a generation of *al fresco* 'innovative' Saturday morning engineering solutions executed on the pavement with a modest selection of borrowed tools and a hammer, thus compounding the woes already inherent in that era of British motorcycle design and manufacture. I had been doing my homework, and had noticed that there is an entire industry built around re-engineering vital parts of British motorcycles, which reinforced my reservations. To my eye, influenced no doubt by a love of tractor maintenance, many British bike engines looked rather delicate and contained all sorts of small and highly stressed bits and pieces, which were only now finally being properly made by enterprising improvers.

I really did not want the subject of a 'restoration' or a 'total rebuild', because you could be pretty certain that somewhere

inside, except in a very few cases, there would still be a lurking horror. The surest way to obliterate character, patina and history is to reach for the vapour bead blaster and spraygun. Besides, the sight of so much polished better-than-newness, while looking good on magazine covers, just makes me feel tired, and I am always tempted to ask owners of such machines – didn't you have anything better to do?

I wasn't looking for a trip down memory lane, either. I'm a bit too young to have spent my weekends either doing the ton on the North Circular or at the Ace Café in its heyday or throwing deck chairs off the promenade at Brighton with my forelock greased to resemble a duck's arse – so that ruled out Triumph, BSA, Norton, Triton, Tribsa and Beezumph – none of which I have ever owned anyway. A Royal Enfield made in India? I spent a year in India in the 1980s and





noticed that everything fell apart as soon as it was made, so that was out too.

Quite apart from the image problem of the British bikes of my teens, there were the engineering problems. I have lost count of how many articles I have read about split and leaking push rod tubes, chewed gaskets, self-destructing bearings, primary chains, con-rods, studs and gearboxes.

The undoubtedly genuine talents of the post-war British motorcycle industry were betrayed by feeble management and poor technical development, and there really are some mechanical turkeys out there

which had moreover been built with worn-out pre-war machine tools. With no youthful memories of British iron to cloud my judgement, I certainly wasn't about to be beguiled in the cold light of the New Millennium.

Probably as a result of having been given a Meccano set and later a toy steam engine as a child, my taste in motorcycles leaned towards the sort of thing Fred Dibnah would have liked. I could happily spend an afternoon watching the gleaming, silent, sliding complexity of a steam-powered Victorian pumping engine, and only

recently I had to be dragged away from a giant Blackstone Oil Engine with a 5ft diameter flywheel at the Bath and West annual show that caused the 10-tonne trailer on which it was mounted to shift nine inches against its wheel chocks every time the thing fired – two or three times a minute.

What sort of motorcycle could capture that kind of essence? The only qualifying motor transport manufacturer I could think of was Massey Ferguson, and unfortunately Massey Ferguson had never built a motorbike.

Then I discovered that they had.

Only it was made by Moto Guzzi between 1967 and 1975 and was called the Nuovo Falcone, or New Falcon. It was produced as a working utilitarian tool for the Italian Armed Forces and Police, and it is that design intention that became the basis of its appeal for me. Like a bulldozer, or a tractor, or a railway engine, it was built to do a job. It was not built to appeal to fickle tastes on a showroom floor, nor made simply for the amusement of undiscerning youth, and this purposefulness manifested itself in well-thought out, properly

designed, effective and durable mechanics, and an absence of 'marketing' appeal.

'PER LE MODERNE ESIGENZE DEI SERVIZI MOTORIZZATI DI POLIZIA E MIKITARI' proclaimed the original sales brochure: **'The Ideal Motorcycle for All Modern Police and Army Requirements'**

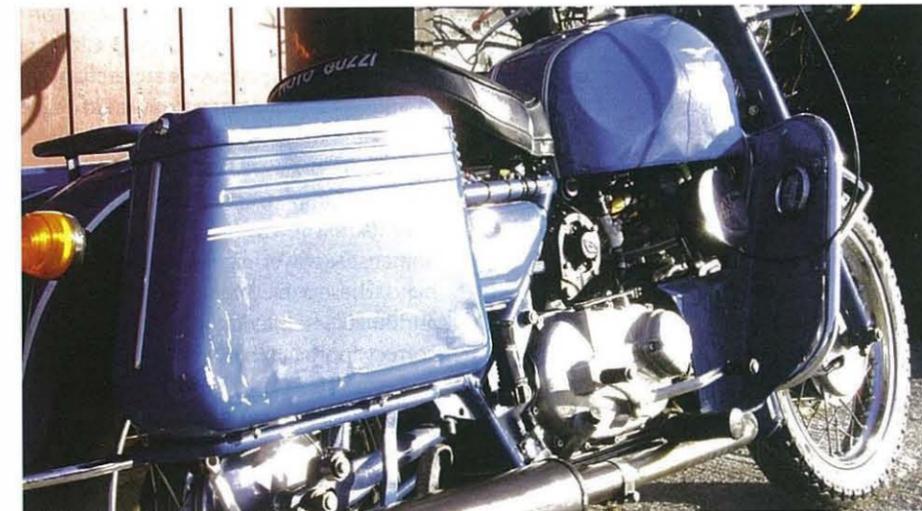
With Italian Government contracts that amounted to State subsidy to provide two-wheeled transport devices to the Army, Military Police and Civic Police Services, Moto Guzzi could, and did, remain blissfully unconcerned by the fact that by the time the 26.2bhp Nuovo Falcone appeared in 1967 it was already 20 years out of date, and could simply ignore the fact that manufacturers of the time were offering, among other technical wonders, a Honda 750 Four or a Kawasaki 500 Triple. Which left them unhindered and unhurried to concentrate on building a heavy, practical and strong machine, suited to the business in hand.

Exactly the same approach as taken by Massey Ferguson when they built my tractor, in fact. You can see just by looking at the tractor that it was designed by a Chap in a tweed jacket with a thin moustache, a pipe clenched between his teeth, standing at a large drawing board with a selection of pencils, a set square and a compass, and the New Falcon likewise by his Italian counterpart.

And just like Harry Ferguson's TE20, the brilliance of the original 1920 design for the Moto Guzzi 500cc horizontal single was such that it had one of the longest production runs of any motorcycle engine. Fifty-six years later, the last Nuovo built had the same bore and stroke dimensions as the original Falcone. And if any more evidence were needed about the strength and serviceability of this engine, consider that it was also chosen to power a popular series of three-wheeled commercial delivery trucks used all over Italy.

The engine is of unitary construction with a separate fanbelt driven dynamo, and with the camshaft and primary drive being driven by helical gears from the crankshaft. Access to the tappets and plug is excellent as the barrel is horizontal. The conventional sump contains 3 litres of oil and is drained by unscrewing the 32mm plug. I knew those tractor-sized spanners would come in handy.

Although Moto Guzzi were essentially conservative in their approach to development, were not afraid to stick to



Final drive chain and silencer are in their British position, while the pannier racks look solid indeed



Left-foot kickstart, mighty brake pedal and that fearsome outside flywheel



Buying an old bike? See more small ads at www.RealClassic.co.uk

Real Bikes. Real People. RealClassic: online at www.RealClassic.co.uk



Transport to delight; the Falcone takes you to some great places...

good ideas, and eschewed innovation for its own sake, their gifted designer Giulio Carcano did also produce a supercharged in-line three cylinder machine, a 120 degree V-twin and the astonishing 500cc V8 that made its debut in 1954 and achieved an average 151mph from a standing start over 10km. The V8 engine, although immensely powerful, could be lifted in one hand. These achievements were directly attributable to the rigorous, sound and correct approach that Moto Guzzi brought to their designs, qualities which their ordinary road bikes shared.

Quoting the original sales brochure, the New Falcon was a development of the original Falcone 500, whose 'sturdiness and simplicity and low fuel consumption soon imposed themselves to the attention of Army and Police Departments' and was 'considerably improved by the use of the most up-to-date technical methods, and (the) above qualities combined with an excellent performance, easy handling and low maintenance costs make nowadays the New Falcone an ideal vehicle for a wide range of services including *scorte* (escort duties), *pattugliamento stradale* (highway patrol) and *servizi urbani* (town traffic enforcement). What better qualities could one ask for in a Classic Motorcycle in 2007?

So although the styling of the New Falcon was what would now be termed 'restrained' or perhaps even 'absent', it was dictated almost entirely by function. Likewise the engineering – a *raison d'être* that was diametrically opposite to that of British factories of the same era, where razzamataz came first. And thirty-three years later, you can swing a leg over this 450lb 500cc thumper, as Paul Friday termed it, and cruise pretty much full-throttle from Somerset to Pembrokeshire and back again via the Black Mountains on a 3-day round trip of more than 550 miles, and return to the comfort of your shed where the massive horizontally-pistoned engine will idle as slowly and sweetly as it did before you left, and the patch of cement under the bike will remain utterly blemish-free, and all the measurable engine clearances, timing settings and chain tension will be identical to what they were before you left, just as I did in mid-October 2006 in that late Indian Summer. How many unrestored late-Sixties British bikes could match that?

Having settled on the make and model, the next thing was to find one. And that wasn't as easy as I first thought, either, because although the word on the street was that Stuart at North Leicester Motorcycles was selling low-mileage original examples, by the time I spoke to him his source had dried up and any he had managed to get hold of had sold like hot cakes.

I soon found quite a nice looking example on eBay, but was wary of bidding and missed it. Except that it didn't sell, and I subsequently struck up a correspondence with its owner in Rome, a fellow by the name of Paolo Spadini.

Then I did what Frank Westworth has told us firmly never to do. I bought a bike about which I knew practically nothing, unseen, untried and from a complete stranger – in a foreign country. As soon as Paolo and I had agreed a price, I transferred funds, found a shipper, and a few weeks later a heavy, blue, unrestored but reasonably well cared for Italian motorcycle was delivered to my back door in Somerset all the way from Rome.

Paolo had christened the bike 'Annibale'. I made the mistake of assuming this was Italian for 'Annabelle' – possibly appropriate for a traction engine, I thought, and there were mechanical similarities... but Paolo soon put me right. 'Annibale' is Italian for 'Hannibal'. Hannibal the Conqueror was, of course, the famously indomitable iron-hard 3rd century B.C. Carthaginian General who made a bitter winter crossing of the Alps with elephants, leading his army of 100,000 men against all the odds to mount an attack on Rome. The symbolism was perfect, and so my New Falcon still answers to the name of Annibale.

Paolo was a lucky find because not only did he send me his wonderful motorcycle, but also an original Italian manual, a large box of spare parts and a selection of original special tools. Later on, he found and sent me, as a gift, a pair of original tin panniers with a mounting frame, an engine crash bar and a pair of original leg shields. I was very touched by his gesture of generosity and as I knew he drove a Jaguar SS100 I sent him as a 'thank you' a tweed flat cap, a Barbour neck scarf, and a spotted handkerchief, and I like to think he adopts the guise of an English

Country Gentleman at weekends in Rome. Paolo also sent me this fascinating history of Annibale, which I have reproduced here just as he wrote it: 'On November 29 1973, it is sold directly by Mandello's Moto Guzzi, to Motor Vehicules of Commune di Roma, and gave to Policeman Group.

'On January 4 1985 purchased from Mr Vittorio Rossetti, who bought twenty motorcycles not more in use, stopped for several years, because substituted by new type MotoGuzzi. Mr Rosetti starts to sell cycles in perfect conditions with a few of kilometres runned.

'On September 24 1986 the cycle is purchased from Mr Pasquale Cipolla. Mr Cipolla lives in the country near Rome. He loves women. He likes to show him on big Moto Guzzi. Unfortunately a night of 1995 he was killed from one of his lovers husband. The cycle is forgotten in a cottage, togheter with hens.

'In 1996 Mr Spadini is informed about the existence of the cycle. It is a period near Easter, but in the country there is snow. After a long negotiation, drinking wine and smoking cigars, Annibale lifts on a truck, and arrives to Rome. He runned only Km 12000 in its life, it is in perfect condition, except for hen's plumes that are present in the wheel.

'On 1997 Annibale and Mr Spadini, spent an holiday together, Rome-Venice and come back beautiful walkings beside river "Po" banks, a lot of kilometres, no problem.

'On 2003 Mr Spadini, following a wrong use of a milling cutter, lacerates five hand's bindings and a vein, as a consequence he must sell more heavy cycles, and also Annibale, much loved from all family.

'On 2003 Mr Cooper shows high quality of valuation on front of many Italians, and a great love for the cycle. He exceeds distance's problems, and he takes Annibale, in the Queen's Kingdom.

'Mr Cooper will write the history's retinue, filled with Annibale's voice, and I hope, long walkings in the famous English green.'

The Nuovo Falcone is a well-kept secret and there are only a handful in the country, but as luck would have it there are two more just in the next village, and that acquaintance has led, as is the way with old motorcycles, to new friendships where there would have been none. It also means that there are more New Falcons per square mile in this corner of Somerset than anywhere else in England.

So what is the NF like to ride? It has a massive twin downtube frame that looks strong enough to handle three times the power. With just 26bhp on tap the frame is never found wanting, and gives die-straight and true tracking when heeled over through the bends. Counter-steering inputs to tighten a line mid-bend are obeyed without wavering, and aided by the low centre of gravity, chicanes are dealt with nimbly and easily. The full-width 9" diameter twin-leading shoe front brake feels slightly spongy at rest, but has a positive servo action when on the move without being grabby, and is capable of almost locking the



Smiling faces; Guzzi owners do appear to enjoy the experience!



'With just 26bhp on tap the frame is never found wanting, and gives die-straight and true tracking when heeled over through the bends...'



front wheel on dry tarmac, while the left-foot rear brake provides good retardation with only a light push required on the 16" long pedal lever.

All the control cables have been replaced with Teflon lined-items from North Leicester Motorcycles, giving very light and smooth clutch and throttle actions, enabling the responsive engine to be accurately controlled. Stiff and jerky cables are not my idea of fun!

With a bore of 88mm and a stroke of 82mm, the short-stroke engine would appear to be built for revs, but any such ambitions are firmly held in check by the massive 20lb external flywheel, which sits spinning backwards just inside your left ankle.

The flywheel serves two purposes. Firstly, it allows a very slow and even tickover, and a smooth sub-walking pace foot-up progression through traffic. Secondly, and more importantly, it acts as a magnet for, induces a grin in and becomes the subject of conversations with passing admirers wherever the bike is parked. Paolo has made a beautiful job of machining away the dry aluminium cover to expose Annibale's spinning metal wheel in all its glory, which enhances the vintage feel of the bike and emphasises its heritage in the fully exposed flywheels of its antecedents.

In fact the NF's lineage can be traced all the way back to the first machines made by the factory founder's, Carlo Guzzi, Giovanni Ravelli and Giorgio Parodi in 1920, which were horizontal 500cc singles. Ravelli and Parodi were Italian Air Force pilots and Giovanni Ravelli was killed in action in the War. The surviving partners then chose the soaring eagle motif used by the Italian Air Force for their motorcycle logo as a tribute to their lost friend.

Their guiding development policy was clearly to retain proven virtues, and has resulted in practical engineering clothed in old-fashioned styling. The New Falcon is the last of this genetic line.

My own model is fitted with its original Bosch Dynastart – the heavy, car-sized dynamo is wired to also act as a motor. It is almost completely silent in action as it is connected to the engine via a rubber vee belt. To start, decompress the exhaust valve, press the starter button and there is a faint whirring noise like the beginning

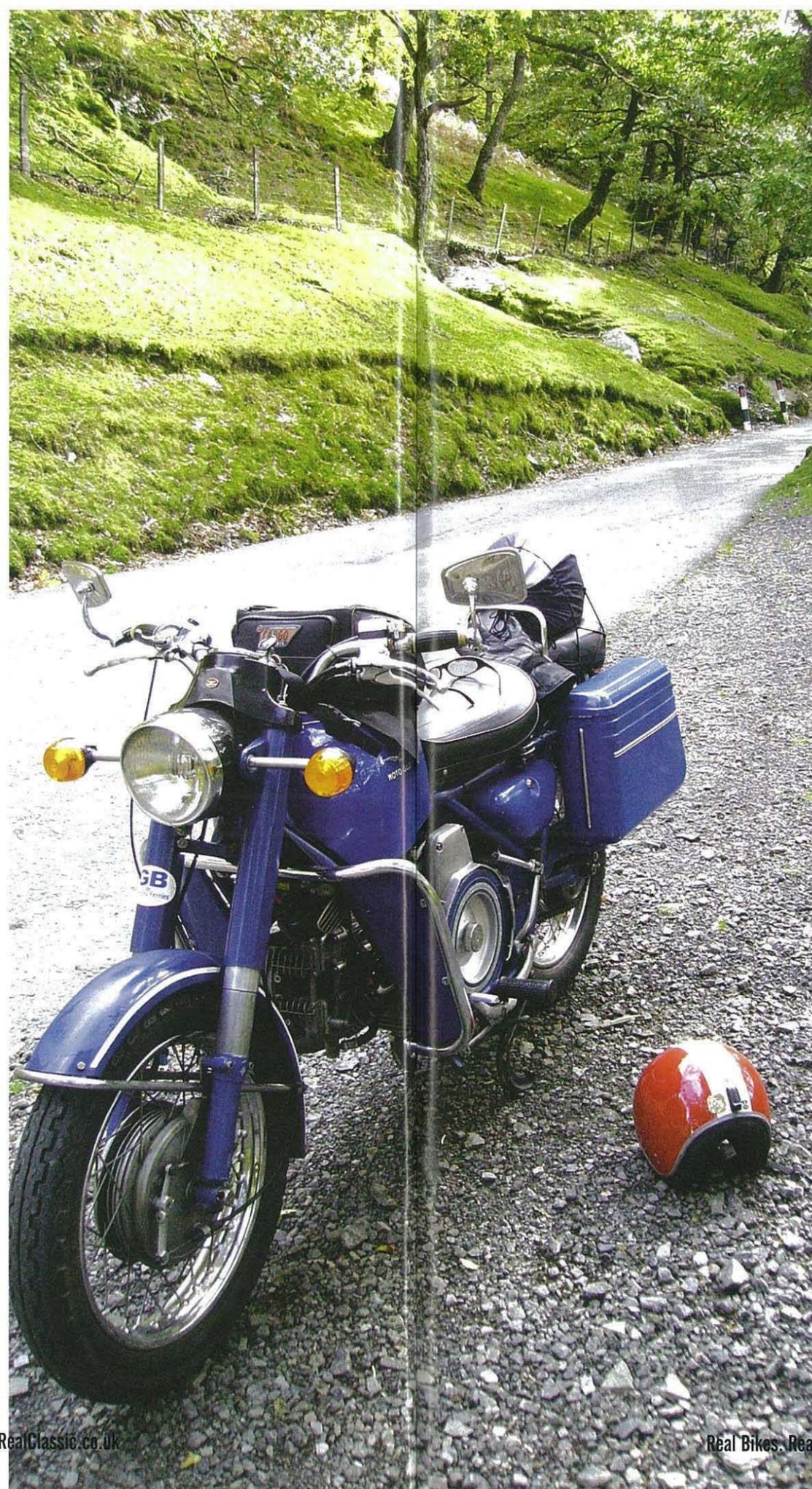
of the spin cycle of an expensive washing machine. Drop the decompression lever back in and the engine settles immediately into its 240rpm idle. The Bosch Dynastart electric leg units are supposed to be as rare as hens' teeth, but I discovered recently (via an email from Paolo) that the identical item was used on the Piaggio Ape 3-wheeled utility vehicle (Ape means Bee by the way, and is pronounced ah-pay) and I was able to buy a brand new unit on eBay from Italy for £60.

Once underway, the revs build nicely to give a powerful, smooth and responsive surge. Very low rpm lugging torque is adequate but not as strong as an equivalent British long-stroke iron-barrelled half litre single, but then neither does it run out of breath and vibrate as the revs build up.

The Nuovo Falcone will leave most modern day traffic behind – waiting to overtake. So you adopt a dominant position in your lane to prevent squeeze-bys. You are not going to indulge in any competitive riding on a New Falcon, but this is a refreshing way to travel, leaving you free to concentrate on piloting the heavy and nicely built mechanics, enjoying the engine, the fine handling and admiring the countryside. Speed cameras can be ignored and you can give the engine its head in each gear most of the time. The gearbox is constructed to withstand the rocker change being stamped on by squaddies in heavy boots and contains car-sized gear wheels. Combined with that flywheel you can, as Paul Friday notes, 'roll a fag' between first and second as you wait for the flywheel to slow down.

This makes steep hill starts a problem because by the time you get into second, you've stopped moving. So you either have a good run up, or tackle Porlock Hill in first. With official fuel consumption of 69mpg, the bike will cruise tirelessly all day at 70 to 75mph, but is equally suited to relaxing and leisurely B road work at 30 – 50mph.

Mild modifications to my own bike include a Boyer points-activated electronic ignition system coupled with the best spark plug money can buy (there's only one plug, so what the heck?) – a Denso W20ES Iridium tipped job with a 0.4mm central electrode. With this combination, the engine will start hot or cold just by looking at it.



Then I replaced the original 29mm Dellorto VHB with a brand new Mikuni 33mm flatslide pumper carburettor, which is remarkably similar to the original. The inlet manifold was modified slightly and I fabricated a new bottom-mounted throttle pull from 6mm stainless bar, as the standard one fouled the tank above. The result is a stronger and more responsive engine, and cracking open the throttle in 2nd or 3rd will leave the standard bike trailing behind. For some reason it occasionally spits petrol back through the K&N filter on throttle shut down – rather like a polite sneeze – although I have set up the jets to work very well at all other times, so a little more fine tuning is required. Or perhaps that's just what they do?

Most NF engines are clattery things, but I have found that the valve clearances as it warms up, so contrary to the advice in the manual I set them with almost no clearance cold. The result is a silent, whirring, sewing machine-like noise from the valve gear. I have tried getting the bike really hot, whipping off the cover and checking the gaps – plenty, so I'm happy with the set-up. I also found that the maximum available advance was 27.5 degrees, but is meant to be 34 degrees, plus 10 degrees static. The bob weights are stamped AA275 which I have supposed to mean Anticipo Automatico 27.5. My theory is that this was a de-tuning mod for service bikes, but I have found nothing to support this in the literature. Being an incurable fiddler, some careful grinding of the bob weight stops and spring bending has given me the full 34 degrees, and as a result the bike will rev happily enough to do 80km/hr in second.

The original double tube silencer gets in the way of the pre-load adjuster on the replacement Ikon rear damper units and makes chain adjustment difficult, so it now lives on a nail in the workshop while Annibale wears an International Harvester item in matt black from the local agricultural merchants' at a cost of £11 plus VAT. Yes, my NF is running on a tractor silencer. It looks the part, and sounds great.

I 'tuned' the new silencer by hacking 6" or so off the end at 45 deg. to get me a 'slash cut muffler', and as I have been charged to fill the Queen's Kingdom with Annibale's voice, I went through the baffle

plate with a 16mm masonry drill bit (...yes, I know, but I don't have a proper drill bit long enough) which just gives a little more bark to the exhaust note when the throttle is opened.

The lights were not great, and I grafted three bulb holders into the rear light housing which now contains a total of 57 LED's (19 per bulb) for the benefit of all that following traffic. To light up the empty road ahead, I transplanted an H4 bulb holder from a dead Nissan into the original headlight, allowing me to use an automotive 60w halogen lamp. With a 30A/hr battery and the 180w dynamo there's plenty of juice for the lights and the twin Italian car horns, which will stop an emerging vehicle in its tracks at 150ft.

The Falcon has taken me to hidden lanes and villages in Somerset on summer afternoons, and through the pleasant backwaters of neighbouring Counties. Together we have enjoyed runs to the Dorset and Devon coasts with the Wells Classic Motorcycle Club, camping trips to France, long runs to Dartmoor, Exmoor, the Quantocks and the Cambrian mountains. Plans are afoot for another Continental journey. Readers will know first-hand the wonderful secret joys open to owners of old motorcycles, but that pleasure is surely heightened by the steadfast reliability of this Italian 500 single workhorse.

Most motorcycle manufacturers like to allude to a racing pedigree. The New Falcon makes no such claims, but carries in its DNA the good, simple, wholesome flavour of an Italy of the 1950s. It hints at a Classical Rome, and the baking red earth of Tuscany and Umbria under a blue sky and an intense Mediterranean sun. When the engine is hot it really does smell of wholesome village-baked ciabatta, with notes of good olive oil and rich local wine. Ancient roofs tiled in Roman clay and a quiet landscape characterised by vineyards, olive groves and the painter's Cypress have reverberated to the deep throb of its exhaust. This is the land and culture from which arose a simple, durable motorcycle which more than 30 years later is still working as it was built to. And so for me at least, the Moto Guzzi New Falcon is the perfect 500 single. With Annibale I am privileged enough and lucky enough to be enjoying 'long walkings in the famous English green'. **RC**