

IGNITION

Points adjustment is fiddly to set up, because the distributor is between the cylinders – a 13mm crow's foot spanner is a lifesaver for distributor adjustment. Once set, they need to be checked every 6000 miles. Many bikes now have fit-and-forget electronic ignition. There are a variety of systems available, such as Silent Hektik, Sachse and Dyna, from around £190 to £350 – depending on design and ancillary kit supplied. A blanking plate is required after the distributor is removed.

SWINGARM

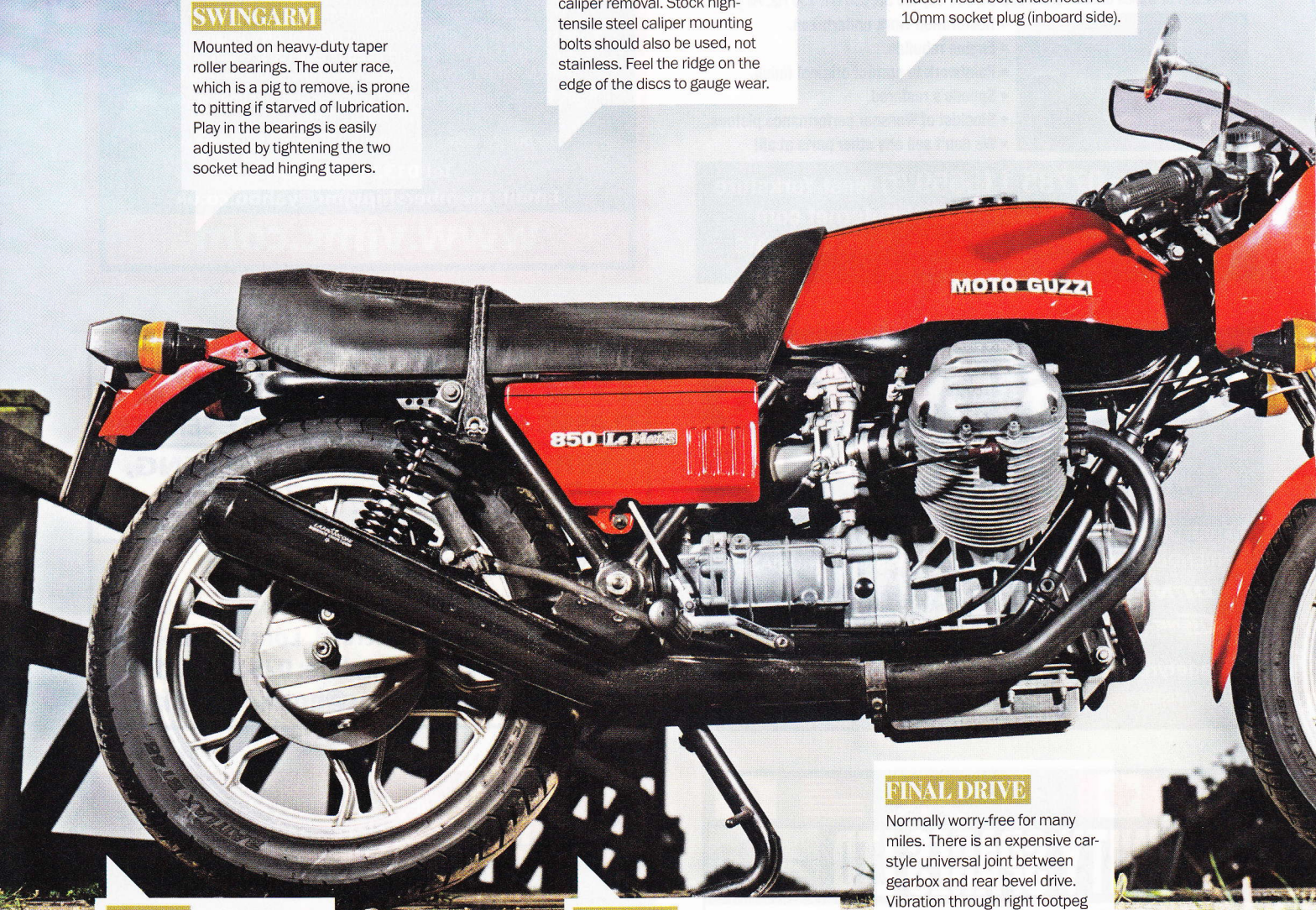
Mounted on heavy-duty taper roller bearings. The outer race, which is a pig to remove, is prone to pitting if starved of lubrication. Play in the bearings is easily adjusted by tightening the two socket head hinging tapers.

BRAKES

The P08 Brembos on Guzzi's patented linked system are still decent. Mk1 Le Mans were fitted with two 6mm steel bleed nipples per caliper, which can seize and shear off. Original pistons were chrome and inevitably seized. Updated Teflon pistons are available, as are overhaul kits for both calipers and master cylinders. From the MkII, Guzzi moved to a single 8mm bleed nipple. The caliper flange joint should be located centrally above the cast iron discs. Guzzi packing shims can be stacked to centralise each caliper; sized at 0.5mm and 0.8mm, they have a habit of disappearing during caliper removal. Stock high-tensile steel caliper mounting bolts should also be used, not stainless. Feel the ridge on the edge of the discs to gauge wear.

ENGINE

The sump can weep oil from its 18 Allen-head bolts or the bellhousing drain. Sump extenders are common (as part of the proddie racing kit for the MkII bikes). Some extenders have either front or rear-mounted cartridge filters. Minor oil weeps from head gaskets are also possible (many owners don't re-torque their heads), as are weeps from rocker cover fronts, at the oil-feed banjo. You can spot a Le Mans 10.2:1 high-comp head by its 6mm manifold bolts – cooking versions use 8mm bolts. Broken cooling fins are common (from bikes being dropped). When removing heads, note there's a hidden head bolt underneath a 10mm socket plug (inboard side).



TYRES

Tried and trusted rubber includes Bridgestone BT45 Battlax, Avon Roadrider or for fans of harder compound, Metzeler Lasertec. Standard front fitting is a 100/90 and 110/90 on the rear, which can go up to a 120. Anything wider will foul the swingarm.

EXHAUST

Standard 38mm or larger 40mm header system fitted with front-mounted balance pipe. The black mild steel system looks great, but has durability issues, especially on the headers if used on gritted winter roads. Many riders replaced the muted stock silencers with loud Lafranconis.

FINAL DRIVE

Normally worry-free for many miles. There is an expensive car-style universal joint between gearbox and rear bevel drive. Vibration through right footpeg can indicate wear, as can heavy clunking on takeoff. Swingarm must be removed to examine the rollers in the bearing. New UJs are £140, but rebuilds are cheaper. Bevel seals may go if the shaft drive is over-filled with lubricant – the trick is to open the filler when the bike is hot, then re-tighten, creating a partial vacuum.

SPECIFICATION

MOTO GUZZI LE MANS MKI

ENGINE/TRANSMISSION

Type	air-cooled V-twin
Capacity	844cc
Bore x stroke	83 x 78mm
Compression ratio	10.2:1
Fuel system	2 x 36mm Dell'Ortos
Clutch/primary drive	dry single-plate/direct
Gearbox/final drive	five-speed/shaft

CHASSIS

Frame	twin loop cradle
Front suspension	telescopic forks
Rear suspension	twin shocks
Brakes front/rear	2 x 300mm disc/single 242mm disc
Tyres front/rear	100/90 x 18 / 4.00 x 18

DIMENSIONS

Dry weight	436lb (198kg)
Wheelbase	58in (1470mm)
Seat height	30in (760mm)
Fuel capacity	5 gallons (22.5 litres)

PERFORMANCE

Top speed	126mph
Peak power	71bhp at 6700rpm

LIGHTING

Original Aprilia headlight was woeful. Replace it with an H4 Cibie halogen headlight. Make sure replacement is for right-hand drive. Indicators and tail-light were by CEV; some NOS are still available – at a price. Early rear indicator stalks were straight; later MkI and MkII stalks were angled and make it easier to fit aftermarket racks.

SUSPENSION

The thin-walled 35mm Guzzi forks are rudimentary and can be beefed up with an aftermarket brace. They are filled with 120ml of auto transmission fluid, which simply acts as a lubricant. FAC (from www.gutsibits.co.uk) do replacement variable air pressure dampers for £180.

HOW TO

BUY A MOTO GUZZI LE MANS

Fast, solidly-built and lustrous with Seventies glamour, it's easy to fall for the Le Mans

WORDS: PETE NORMAN. PHOTOGRAPHY: CLASSIC BIKE ARCHIVE, PETE NORMAN

If your idea of high performance is sustained 100mph bend-swinging from dawn until dusk, you'll love Guzzi's Le Mans. Its seasoned and grunty pushrod engine can happily sit at the ton all day – and return 55mpg with a 200-mile range. It's spanner-friendly, too – it takes less than 60 seconds to change both spark plugs.

Handsome from any angle, early Le Mans are awesome viewed from head-on, with those monster barrels, full of filthy torque, jutting out. And side-on is just as sexy, with every shop window reflection flashing a long 'n' low Seventies profile.

The power's there to back up the visual glory, too. Okay, the Le Mans can be a pig around town, with sluggish response below 5000rpm, but open it up and you'll feel the force as the bike lunges off down the road, with nothing behind you but dust and a wall of baritone noise.

With a copy of the MkII manual in your pocket, you also have a licence to speed. I quote: 'This motorcycle can be considered as in the racing machine class and as such has to be ridden in a sportsmanlike way'. Though three paragraphs later comes the warning: 'This model is fitted with carburettors with pumps. If the twistgrip

is not used correctly in accordance with the engine revolutions, there might be an excess of fuel which is ejected by the carburettors. It is obvious that if in such conditions the engine backfires, the risk of a fire is quite considerable.'

Although the owner's manual exaggerates the likelihood of the Le Mans turning itself into a fireball on the overrun, this is a Moto Guzzi we're talking about, so you're guaranteed plenty of quirkiness. Once familiar, the quirks become part of the charm – apart from the self-retracting sidestand with its self-destruct tendencies.

As the Le Mans is a sportsbike with pumper carbs and high-compression heads, the idiosyncrasy of the longitudinal V-twin-with-shaft-drive layout is exaggerated. Attempting to elicit rapid upshifts from the agricultural five-speed gearbox can result in dramatic lunges due to over 9kg of flywheel inertia spinning at crankshaft speed meeting with the car-style dry clutch. Ditto compression skids if you don't blip on the way down. The bevel drive rear end also rises on acceleration. That's what you're buying into with the Le Mans – a flawed Italian thoroughbred. This guide focuses on the 'round-barrel' MkI and MkII examples of the breed.

MODEL HISTORY



While the Le Mans ran from 1975 right through until 1993 (with the MkV), this history deals with the MkI-MkIV models.
1975-1976 850 Le Mans Series 1
Fewer than 2000 produced. Frame

numbers VE 11111 to VE 13040. Bikini fairing, short Gaman seat, sinister black exhausts from round barrels and 36mm Dell'Orto pumper carbs. Standard mild cam fitted with larger 44mm and 37mm valves and high-comp pistons. Red or ice blue paintwork, FPS cast wheels and linked brakes with drilled Brembo discs.

1977-1978 850 Le Mans Series 2 Cosmetic changes included ditching the fluoro flash, a new oblong De Tomaso taillight, Gaman two-person seat, black fork sliders, heel guards and speedo tripmeter. Some bikes were white. More than 4000 produced. Frames VE 13041 to VE 17311.
1978-1980 850 Le Mans II
As punk died, so, too, did the

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► Pete Norman:
'Look into my
eyes – buy one'

OWNER OPINION

'DON'T BORE IT OUT'

Pete Norman and his '76 Mkl

The manual says 1800 miles between oil changes, but I don't go beyond 1200. I used 10W/40 Rock Oil semi-synthetic, but recently swapped to 20W/50 Morris V-twin. The filter is swapped every second change (the manual recommends a change at 15,000km/9300 miles). I do gearbox and bevel oil at 3000 miles, half the recommended, with a dash of molyslip for the rear. Compression is 183psi on both cylinders, only 4psi down on the 187 I saw just after Nigel at NBS prepped the engine.

I get 20% better fuel economy than bored-out bikes. They have a little more torque when winding open in top, but I catch 'em quickly and top end is the same.

Electrics? Last summer my little LED voltmeter showed a dropping voltage. Then the ignition switch packed in. I got a new ignition switch, only to discover a bad battery feed connection in the original loom – with that cleaned up, all was well. I put in headlight relays to ease the strain on the chintzy original switchgear feeding the Cibie H4 headlight. My Sachse electronic ignition is simple and rugged and the advance curve is spot on.

'A FORGIVING MONSTER TO RIDE'

Peter Silverleaf's G5-turned-Mkl

I got someone to do the Mkl conversion on my bike. I was working for them at the time and they powdercoated the frame, put on a new seat, panels, clocks, fairing, Tomaselli throttle and repainted it – including gold wheels. A lot of people pull up next to me and think it's an original, but then occasionally I'll get someone who says: 'What is that?'

I used to do a one-and-a-half-hour commute from London to Cardiff on the bike – I could do it in 90 minutes. I'd take my hands off the bars going across the Severn bridge and take it all in. It was a sign from the gods.

Over the years, only niggly things have gone wrong. Generally, I keep the oil topped up with whatever I can get my hands on. It drinks it and seeps it. When it goes down, it seems to run rougher and I know it's time for a top up.

It's such a loveable and forgiving monster to ride – as robust as an old tractor. I do the oil filter, but not sure of the mileage as the speedo cable keeps breaking – a Guzzi trait.

'IT ALWAYS GETS ME THERE'

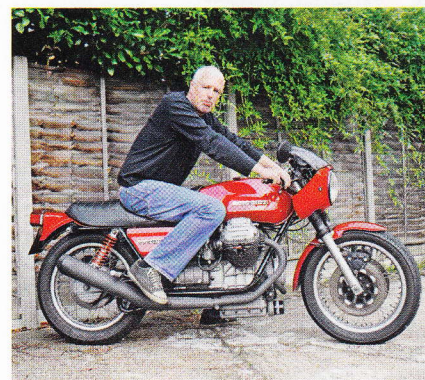
Justin Popham's Mkl

My roundtail Mkl now has 36,000 miles on the clock. I've never been too precious about keeping it original. I'm more interested in riding it. It's got a big bore-kit and 40mm Lafranconis. I improved the handling by fitting Fontana shocks and Marzocchi forks (with gaiters and a brace) and replaced the heavy cast wheels with spoked hubs on Akront rims. I've got Metzeler Lasertecs on it, but next time I'm trying the Conti Classic Attacks.

The low seat makes it ideal for small riders, but I'm 6' 3", and the standard pegs are too cramped for anyone over about 5' 11", so I fitted Agostini rearsets, which make life a lot easier.

Whenever I've broken down, I've always been able to get the bike repaired and ride home. On a trip to Le Mans, my flywheel came off, but myself and a couple of pals stripped the bike in 20 minutes, bolted the flywheel back on with bolts bought from a local tractor shop and carried on to the track. I have never failed to complete a journey on a Guzzi!

My bike was off the road from 1999 to 2010. I recommissioned it in the garden shed and had it rewired by Steve Hallam – he did a brilliant job. I didn't bother stripping the engine, just ground-in the valves and whacked the cylinder heads back on. It started on the button and remains oil tight. I do the filter when I change the oil at the same time because with the sump extension access is easy.



► Fire it up and turn that frown upside down

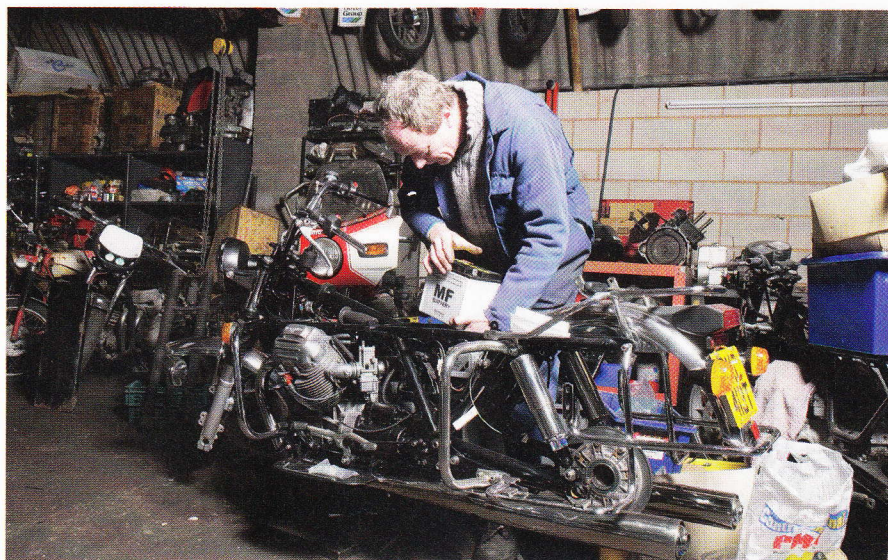
Le Mans' aesthetics. Mechanically similar to the original (now dubbed the Mkl) but the sporting purity of the original gave way to wind-tunnel-perfected aerodynamics. The result was an awkward but functional angular fairing. No wonder many Mkls are now excellent Mkl lookalikes. Front calipers moved to the rear of beefier forks, shocks were bigger; a plastic alternator cover, car-inspired dash and improved centrestand tang all appeared.

All lights turned rectangular and colourful Lego-esque switchgear replaced the flimsy Mkl kit. Late production run bikes – also called Series 2 – got air-adjustable forks and shocks, and patented Nigul-plated cylinders. Red, non-metallic bright blue and white colour options. Some unsold UK bikes got a 900SS-style black-and-gold makeover by importer Coburn & Hughes. Around 7000 Mkls were produced; frames run from VE 17312 to VE 24086.

1980-1985 850 Le Mans MkIII At least 44 documented mods and upgrades heralded the square-barrel's arrival. The fairing went small, albeit still angular. The Tonti frame incorporated a crankcase breather, wheelbase increased and the cheap welded-on peg brackets were replaced by semi-decent alloy kit. A big, white-faced Veglia tacho greeted the rider. Carb springs were lighter but still required a wrist of steel. New plastic switchgear and harder, moulded

seat. Internal mods included redesigned rocker oil feeds, a heavier crank and altered conrods, helping to give a 3bhp power increase. Emissions regulations saw an airbox replace trumpets and more muffled exhaust. 10,000 produced. Colours: red, metallic grey, white. Frames from VF 11111 to VF 20700. **1984-1985 Le Mans 1000 Series 1 (or MklIV)** Most powerful model to date. 16-inch front wheel and smaller front discs. Bodywork

influenced by smaller Lario models. Updated engine, bored out to 949cc. Overall much larger than a Mkl. New pistons, rings, combustion chamber and valve design, with power boosted by using the early B10 performance cam. New 40mm pumper carbs, updated crankcase-to-frame breather circuit, new clutch plate design, black exhaust system and power up to 81hp. Myriad other changes, including a centrally-placed sidestand at last. Frame numbers from VV 11111.



EXPERT OPINION

Nigel Billingsley has been working on Moto Guzzi V-twins for three decades and has run NBS Motorcycle Servicing in Staffordshire since 1992. "I must have rebuilt close to 100 of 'em," he says.

The big-bore Guzzi twins are robust, simple to work on and capable of high mileages. Parts are interchangeable between many models, although the Le Mans' high-comp heads and bigger valves are unique. The weak points are the cam followers suffered from surface hardening issues and pitting, which could then do the camshaft in. Camshafts can be reprofiled. Valve guide wear can show up as smoke on start up or blue smoke on the overrun as the vacuum sucks oil down from the rocker. If cam followers need swapping, they are about £30 each plus labour, and it requires barrels and exhausts off – about an hour each side – so you are probably looking at £350 fitted. Instead of replacing valve guides, we put in a liner and it works brilliantly – £90 for both plus labour.

The parts interchangeability of Guzzis has its limits – if you want Le Mans heads on your T3, you must also change the pistons and barrels. Also, on the square-

barrel engines they moved the studs further apart to allow for bigger bores, so you can't mix the two.

I haven't noticed any difference with valve seat issues due to unleaded.

Exhaust valves can burn out, but that is more likely to be due to insufficient tappet clearance. Standard setting is 0.22mm, but they do need to be set loose.

The Mk1 had cast iron liners, and so did the early Mk1Is.

They rarely cause problems, but not running air filters, can cause excessive bore wear. They can be rebored, but it's hard to get oversize pistons, so the best option is a complete set of barrels and pistons – expensive, but at least you also get new rings, gudgeon pins and gudgeon circlips. The later bikes had better Nigusil alloy barrel coatings.

You can do twin-spark conversions.

It does make an improvement, but it isn't huge. It's about £200 for a round-barrel, and it goes directly opposite the existing spark plug. Le Mans engines do have an efficiency issue. One side of the plugs show a clean burn, the other has a build-up of carbon, so there's an efficiency gain to be had; the factory does it now on new bikes.

THE NEXT STEP

SPECIALISTS,
CLUBS,
EVENTS AND
LITERATURE

BIKES SPARES AND SERVICE

NBS Motorcycle Servicing Staffs,
01889 271818
Corsa Italiana Surrey,
01932 252255
Moto Strada West
Yorkshire, 01274 592500
Motomecca Spares
Dorset, 01747 812136
Motori Di Marino West
Sussex, 01798 813260
Gutsibits West Yorks,

01484 841395
Stein Dinse Germany,
www.stein-dinse.biz

CLUBS

Moto Guzzi Club GB
www.motoguzziclub.co.uk

LITERATURE

Gambalunga
Bi-monthly magazine of
the above.
**Moto Guzzi Sport &
Le Mans Bible** By Ian

Falloon. Handy.

Guzziology

By Dave Richardson.

Illustrated Moto Guzzi

Buyer's Guide

By Mick Walker.

Moto Guzzi Le Mans

Performance Portfolio

1976-1989

Hugely informative.

Moto Guzzi Twins

Restoration

By Mick Walker.

Buy it and get stuck in.