

Cycle

AUGUST 1977 • 75 CENTS

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EVALUATION:
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CARBURETOR

MOTO GUZZI 850 LE MANS A FLASH BIKE FOR THE THINKING MAN

HOW TO:
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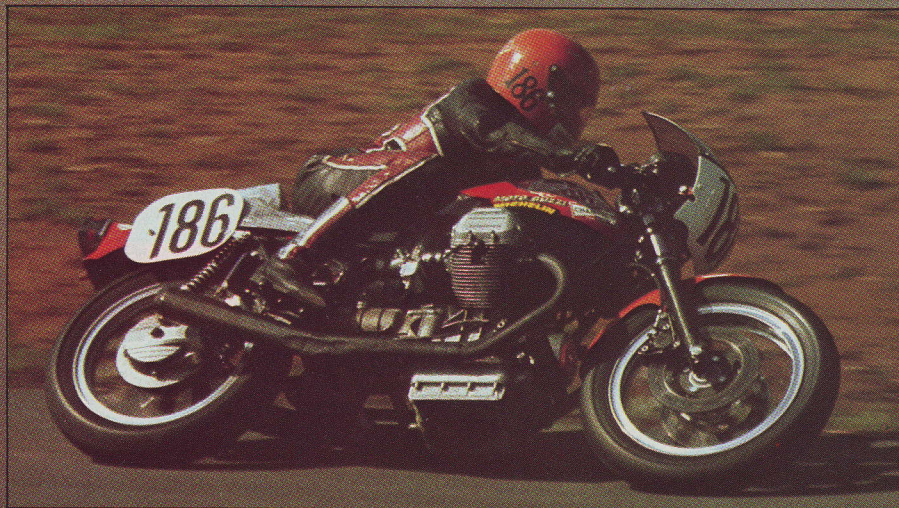


PHOTO: JAMES HUFF

Cycle Test

The Le Mans is a spectacular tearing-around-the-twisties motorcycle. With a little help from its friends, it can win AMA Superbike Production races too—as long as its friends are Reno Leoni and Mike Baldwin.

● THE MOTO GUZZI 850 LE MANS IS ONE OF a handful of motorcycles referred to sometimes affectionately and sometimes not as "flashbikes." To qualify for this terminology a motorcycle must be rare, expensive, European, quirky, handsome, hi-perf and a bit of a technical or stylistic oddball. The qualifiers? Ducati 900 Desmo; MV Agusta 850-four; Laverda 1000 and 750; BMW R100RS; Benelli Sei; and the Moto Guzzi. There is no such thing as a Japanese flashbike; the Japanese manufacturers' world is too real, and the quantities in which even the most technically spectacular offerings are produced nullify any hope for rareness or the required expense.

A good solid flashbike gives the owner much to endure (beyond the initial purchasing price, and the cost of insurance). If a bike has no warts on its character, after all, how is one to know whether it has a character at all? Parts must be practically unobtainable, and expensive beyond reason; maintenance ought to be time-consuming, arcane and the subject of much discussion; detail work should be shoddy, serving as evidence that the manufacturer had more important things to spend his time and concentration on; and in a perfect world there should exist neither owner's handbook nor service manual to light the way.

Some flashbikes are more successful in this abstract sense than others; the Ducati Desmo probably leads, heading the list in several categories of perversity.

But there have to be defensible reasons for "putting up with" all this nonsense. There can be no doubt, for example, that the Desmo owner puts up with what he has to put up with because his motorcycle is the best high-speed handler in all of motorcycling. There can be no doubt that the MV Agusta is prodded down the road by an engine supreme in its reliability and power output. There can be no doubt that the Laverda 1000 offers a fine combination of stability and performance. There can be no doubt that the Benelli Sei really has six cylinders, sounds like a Porsche and has no engine vibration to speak of.

These are the tangible rationales for the flashbikes; without them the intangible defenses would be meaningless. And so to the Guzzi 850, one of the flashiest of the flashbikes: red, a bikini fairing, matte black exhaust pipes, quasi-rearset footpegs, a unique padded seat section resting on the rearward portion of the fuel tank, clip-on handlebars, a hefty pricetag, one-piece alloy wheels, big carburetors, three disc brakes and plenty of displacement.

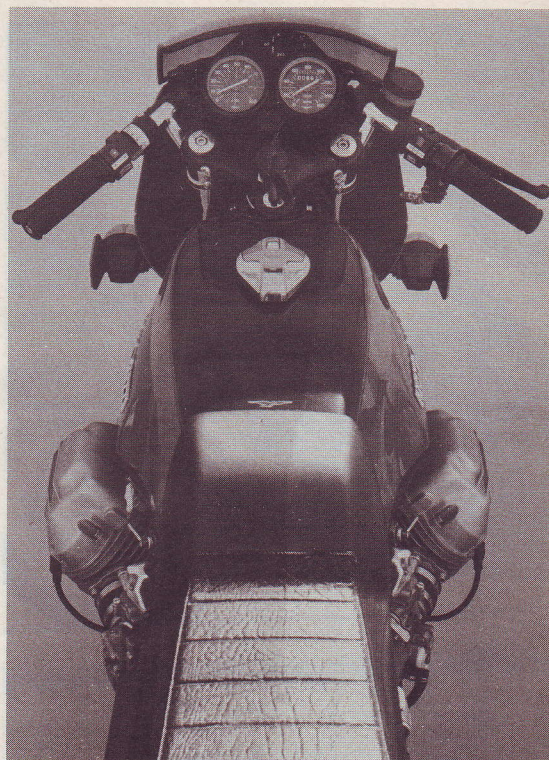
What makes the Guzzi unique among flashbikes in general and Italian flashbikes in particular is its suppleness, its comfort, its lack of feistiness, the number of dealers who can provide parts and service, and its friendly, accommodating nature. Because its engine is essentially the same as the engines in the 850T, the 850T3 and the V-1000 Convert (indeed, it's an engine that has been with us for a decade) it holds no particular mechanical mysteries and can be regarded as a mature powerplant, much like a 350 Chevrolet. There are no slicko-tricko components in it which demand the constant attention of the little guy in the overalls who charges as much as a brain surgeon. The bike offers all or most of the touches of civility we have come to expect from modern motorcycles: electric starting, turn signals, a dashboard full of idiot lights, quick-detach side covers, that sort of thing.

Still, there are enough glitches to let you know it *is* Italian, and it *is* a flashbike. A perfect example: as the bike is sold (and as ours was delivered) there are no air cleaners, which means that not only are the cylinder bores, valves and valve seats, and piston rings going to wear out more rapidly than normal, but the rider gets to listen to a lot of inlet tract noise that cleaners would otherwise mute. There are intake screens, of course; but the big 36mm Dell'Orto pumper carburetors and their gray plastic velocity stacks are arranged in such a way as to make the fitment of filters difficult, unless the stacks are removed altogether.

The handlebar switches, of course, are in the Italian idiom—which is to say not

quite terrific. The turn signal switch is so light to the touch, so small and so weakly detented that the rider has to keep an eye on one of the front winkers to see whether it has gone on, or off; the horn button and the headlight flasher button are on different sides of the same rocker switch; and the headlight dimmer switch is a long way from the rider's left thumb.

To conclude our list of ticky-tacky complaints most testers found the seat covering slippery; the side-stand is located under the forward part of the engine a long way from the bike's center of gravity, has a small foot, is difficult to deploy and does not support the bike adequately; the passenger grab-strap caused one rider to feel as if he were sitting on two wallets; somewhere between the twistgrip and the throttle slides is a rough-spot that feels like the slides want to stick closed; the shift lever needs to be pivoted down lower



PHOTOGRAPHY: PAUL R. HALESWORTH

MOTO GUZZI 850 LE MANS

in response to the Le Mans' racy seating position, but it contacts a clamp on the left-side muffler as it is and cannot be relocated unless more clearance is provided; three staffers discovered that the "Reserve" position on the dual petcocks is in no way connected to an auxiliary fuel supply. The staffers all made this discovery the same way: by running dry, and pushing to the nearest gas station. Complicating the matter is the rather unique absence of any kind of trip-meter or resettable odometer, so one really has no simple way of determining when the Le Mans will start to suck air.

Although this list of whining complaints seems lengthy, in reality it is not—for a flashbike. Compared to the Desmo, the Moto Guzzi is almost Japanese in its completeness.

In truth, the Guzzi is the only shaft-drive that handles exceptionally well when ridden hard. (The late-model BMWs are

good and so are the 750 Yamahas, but both have some cornering clearance limitations.) It ranks among the top five handlers in the street/sporting world, chain or shaft, and the reasons why are numerous. First, the chassis: a fairly conventional double-cradle apparatus with a long, large center backbone tube welded in between the top of the steering head and a cross-member that spans the two upper side-rails. Three frame tubes stabilize each forward end of the swing arm. To make engine removal possible, the two lower members detach from the chassis' main body; this unique bolt-up arrangement has no apparent effect on chassis integrity.

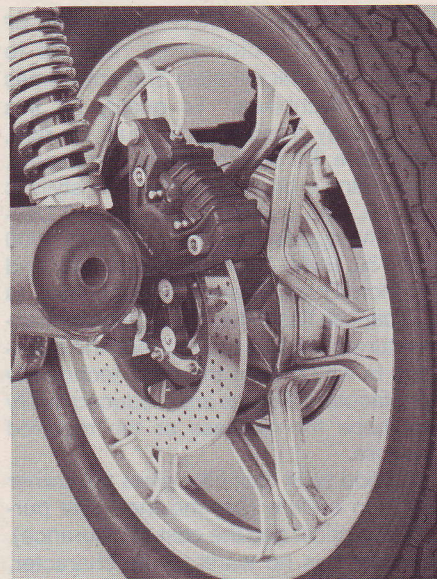
The frame's secret is not in the layout, but rather the material. Like the V-twin Ducatis' chassis, the Guzzi's frame is made from large diameter, thick-wall tubing that may weigh more than a comparable Japanese frame, but resists flexing more successfully.

The second component of the Moto Guzzi's stability is the configuration, and resulting location, of its engine. Side-to-side the 850 powerplant measures ten inches across the cases; a Z-1, 22-in. In other words the Guzzi engine is fully a *foot narrower* across the cases than a competitive Japanese offering. The effect? Narrow means low, and the lower is better, because the lower the engine, the lower the center of gravity.

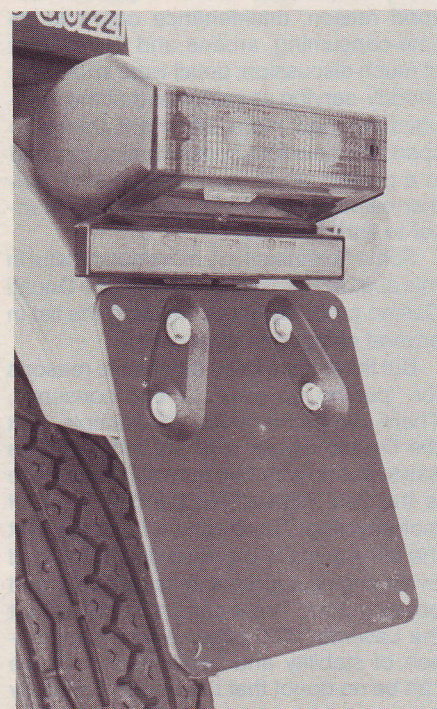
The 850 Le Mans is a charm on a charming road. While the Metzeler rib-front and racing-profile rear tires transmit a greasy, tentative feeling up through the suspension in fast corners, the rest of the bike copes nicely with mountain road situations which traditionally have upset other high-performance heavyweights. Bumps in the middle of fast sweepers, varying radii, negative camber, turns with rocks or dirt on the ideal line that force an attitude change at an inopportune moment: all these have unstrung a host of Cycle test bikes. The Guzzi was unperturbed by such challenges, and throughout our association with it remained a delight on Racer Road.

MOTO GUZZI 850 LE MANS

Compared to most flash-bikes, the Le Mans' great strength is its versatility. It has the integrity for the twisties, the smoothness for the Interstate and the suppleness for around-town putting and puttering.



Two drilled and tapped bosses below rear caliper locate the parking brake caliper on the V1000 Convert.

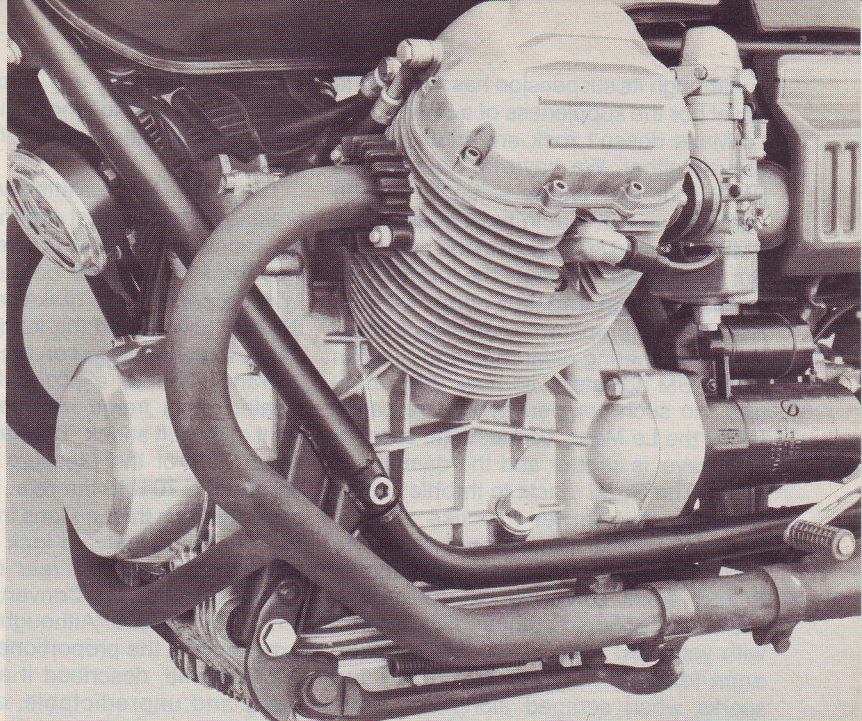
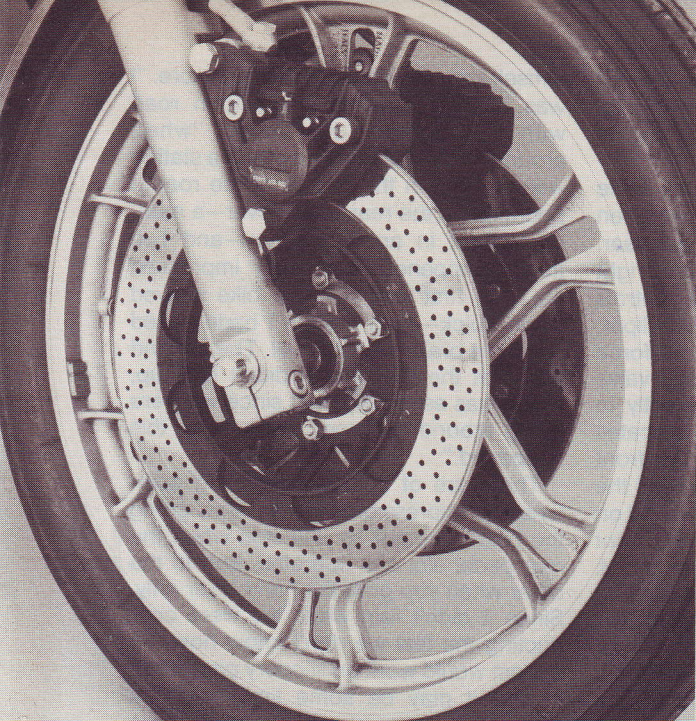


Crisp, hard-edged styling of taillight complex shows influence of Ital-Design and Alejandro De Tomaso.

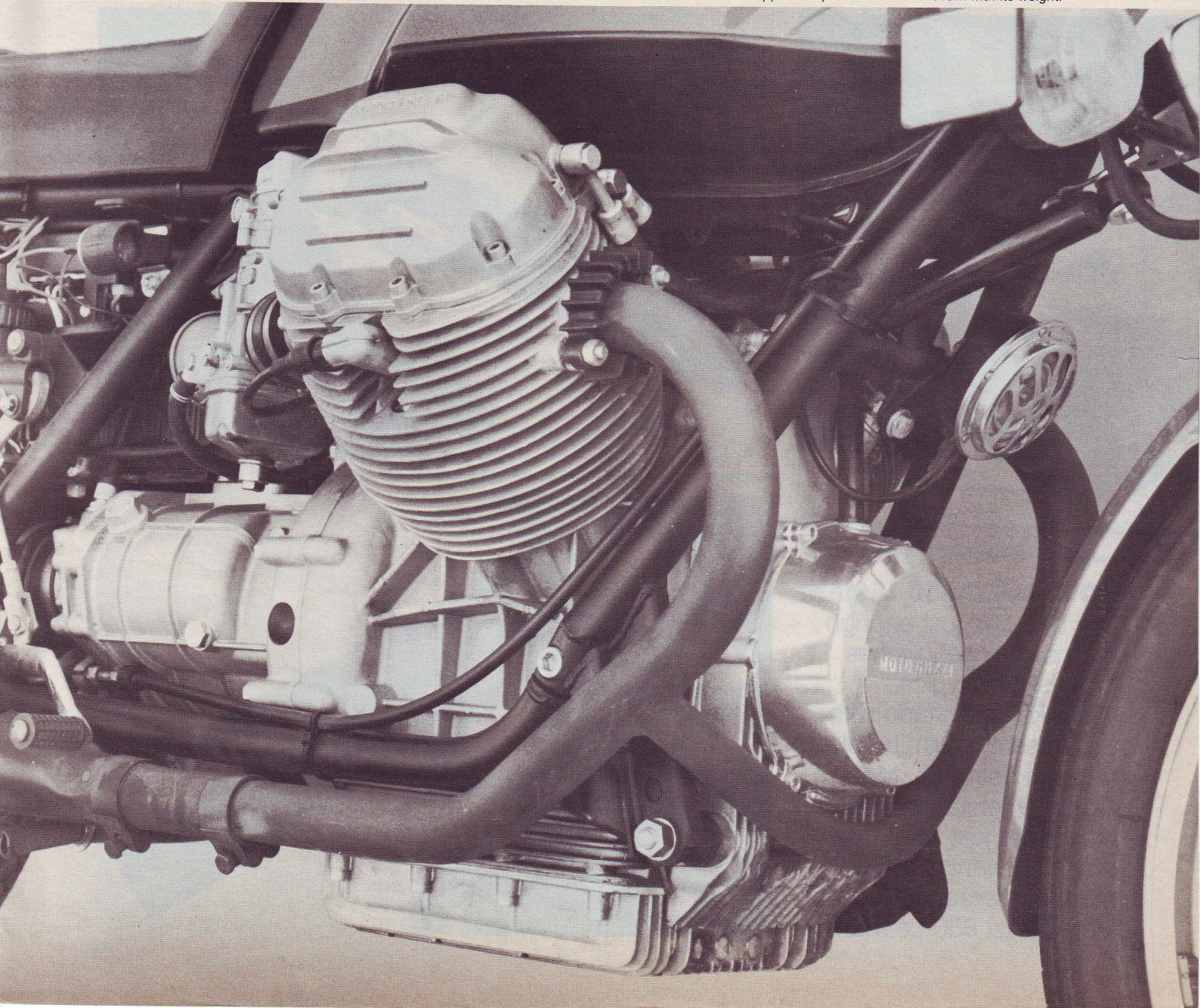


Proportioning valve distributes braking force from rear master cylinder: 70% to rear brake, 30% to front.

CYCLE



The Le Mans is an engaging amalgam of Italian passion and Japanese completeness. Matte-black exhaust pipes are racy as the dickens, but they're also quiet. External rib reinforcing on crankcases is rare; Metzeler tires aren't, but should be. Front brake apparatus penalizes the front fork with its weight.



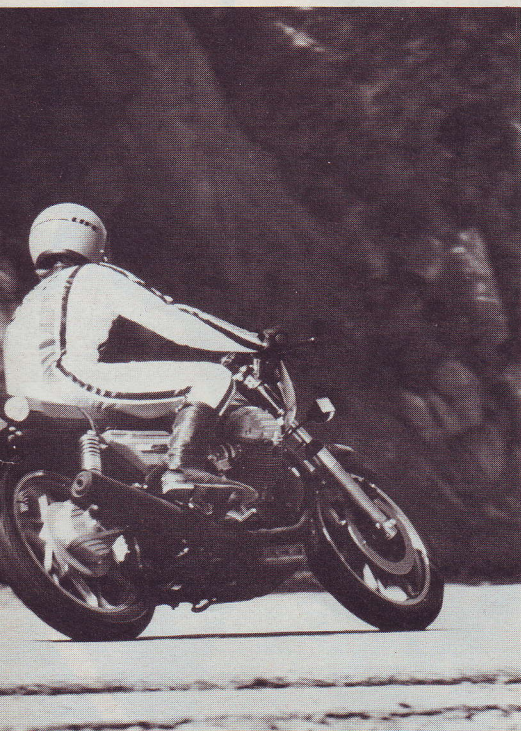
Although its suspension has neither the travel nor the suppleness of a BMW's, the Le Mans doesn't rock and pitch as vigorously either. We have no quarrel with BMW fork and shock settings; on the contrary we feel that in most situations a BMW front end is the best in the business. But if you happen to snap the throttle shut midway through a speedy corner on your R100RS, be prepared to give up a measure of cornering clearance and hold on as the BM adjusts to its new, lower posture. No such compensations are called for by the Le Mans, because the suspension travel is shorter and the damping is stiffer. The Guzzi reacts to throttle setting changes mid-corner just like a good chain-drive bike; namely, not at all. To make it even nicer, the two small-diameter tubular stubs sprouting off the center-stand (designed so you can flick it down with your toe) serve admirably as clearance-feelers. They provide noise and sparks when scraped along the pavement, but they have enough give to keep

them from causing any trouble. Do not expect, however, to ignore their warnings and get away with it forever. If you do, the tires'll getcha.

The 850 Le Mans is fitted with the same braking system we first experienced when we tested the V-1000 Convert last year. The front brake lever controls the right front caliper; the rear brake pedal controls the rear caliper and the left front caliper. As pressure is exerted on the pedal, force is transmitted to a proportioning valve located on a frame member directly in front of the left shock. This valve allocates about 30% of the pressure to the front caliper and 70% to the rear. We tried the same thing on the Le Mans that we did on the V-1000: namely, to lock up the front wheel using only the rear brake pedal. Couldn't do it on the Convert; couldn't do it on the Le Mans. Although one staffer, experiencing the proportioned brakes for the first time, described it as unnatural, scary and unpredictable, another test rider more familiar with the system found

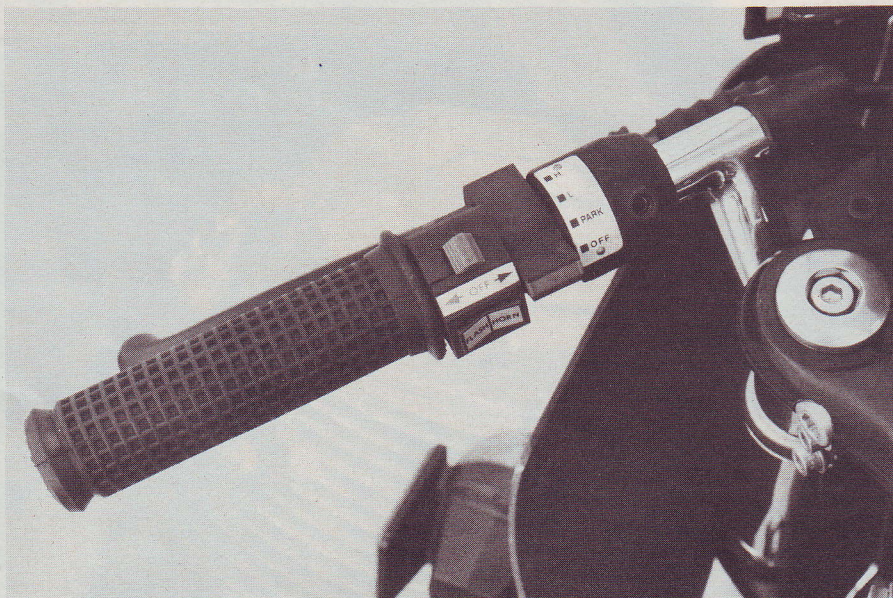
himself liking the theory more and more. "I was running down this mountain road with a passenger," he related, "when around this corner came a guy in a station wagon, right in the middle of the road. I pounced on the rear brake lever—a natural instinct in an emergency—and two things happened that really impressed me. The first was that the bike slowed down quick—even though I hadn't used any front brake (lever) at all. The second was that the rear wheel didn't lock up, which was especially neat since we were going around a corner when all of this happened."

There are of course conflicting opinions and impressions. In very slow going the bike does pull to one side when the rear pedal alone is operated, and to the other when you grab the hand lever only. Since it didn't rain when we were conducting the test we don't know how the system would work on slippery pavement. In fact it may be some time before a conclusive consumer verdict is in (there

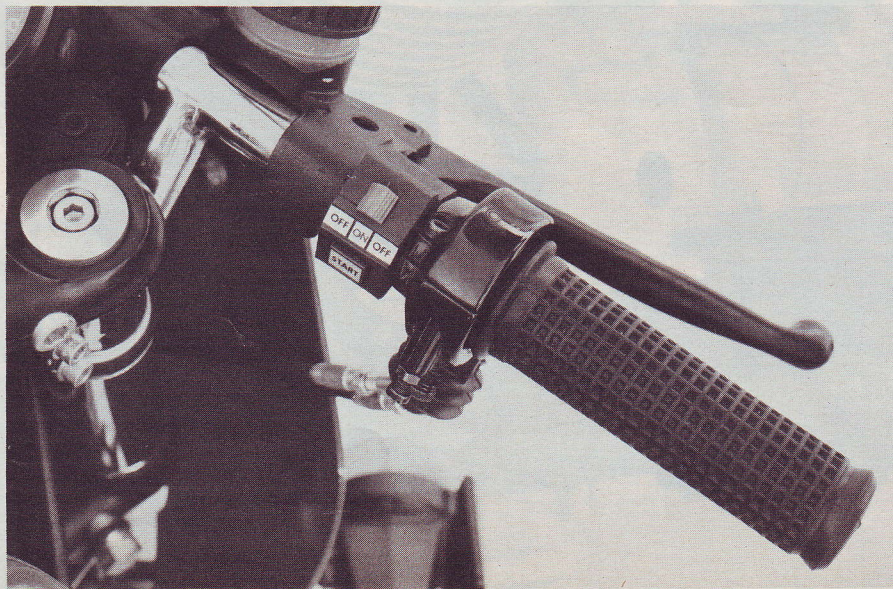


MOTO GUZZI 850 LE MANS

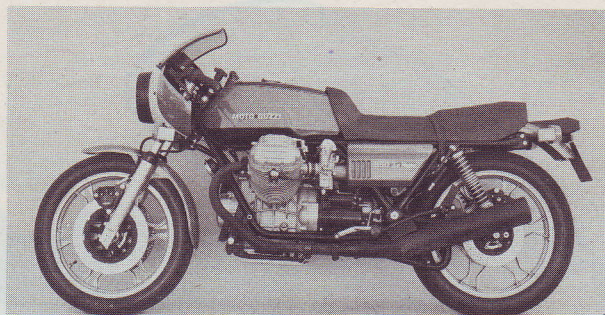
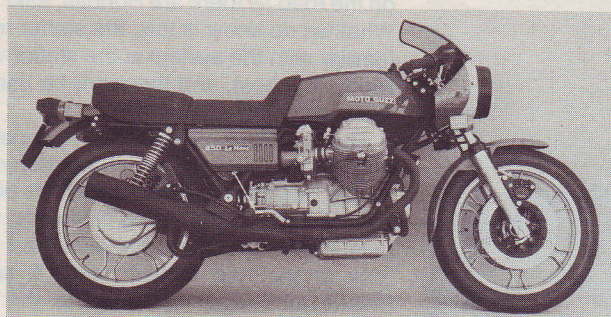
The bike has just enough inconsequential glitches to satisfy the typical flashbike aficionado without presenting him problems he can't deal with. Moto Guzzi understands what he wants, not just what he thinks he wants: this is the great secret of the Moto Guzzi 850 Le Mans.



Switches continue to baffle Guzzi. Dimmer is too far away, and turn signal switch is too delicate.

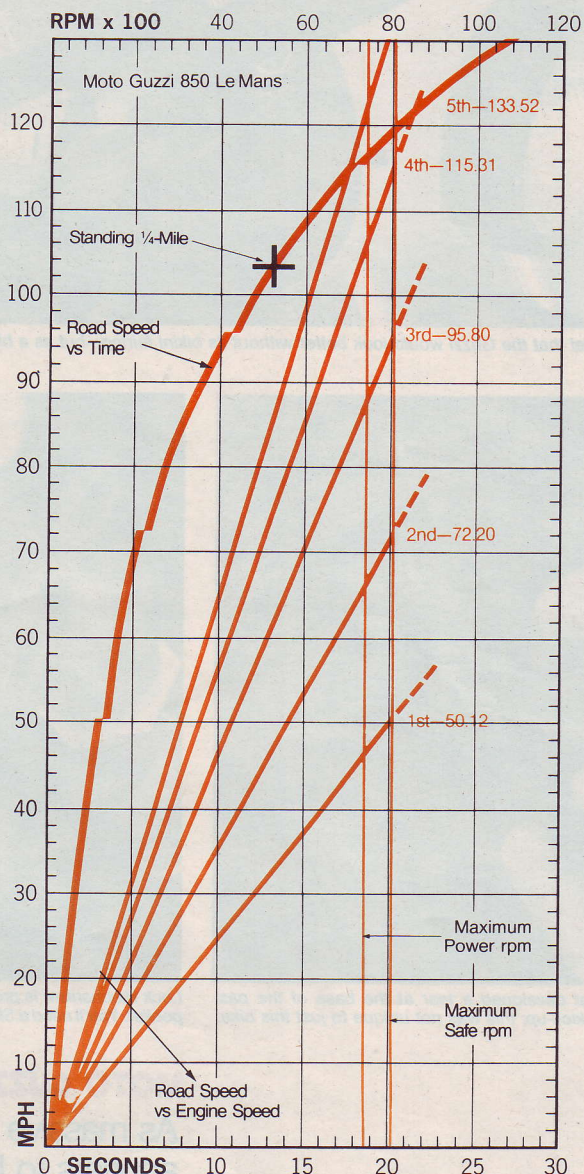


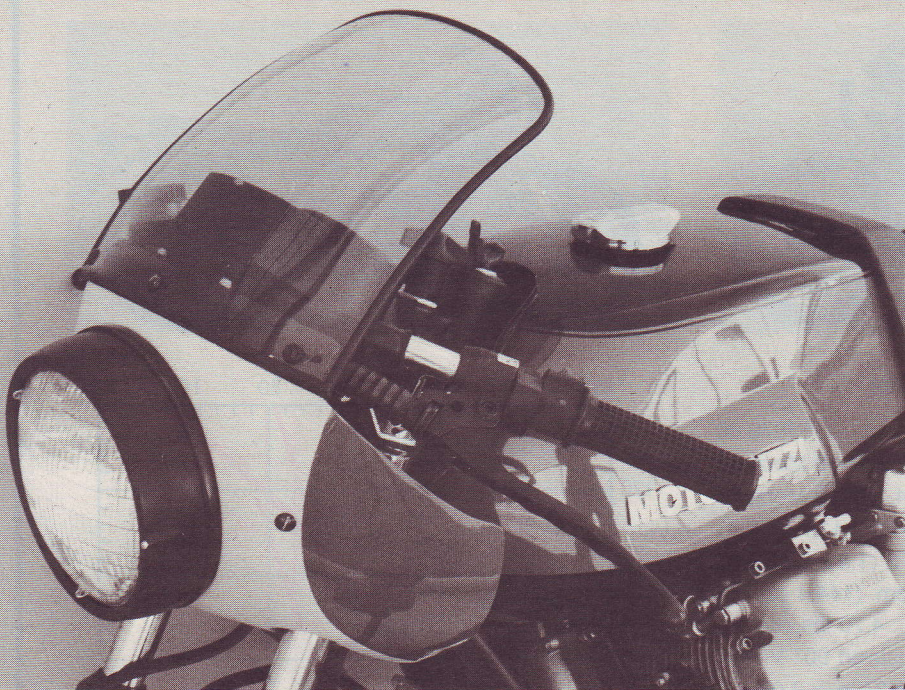
CYCLE



MOTO GUZZI 850 LE MANS

Price, suggested retail	\$3679.00
Tire, front	3.50H-18 Metzeler
rear	4.10V-18 Metzeler
Brake, front	38 x 300mm x 4 (1.5 x 11.7 in. x 4)
rear	38 x 242mm x 2 (1.5 x 9.43 x 2)
Brake swept area	931.3 sq. cm. (144.4 sq. in.)
Specific brake loading	4.70 lbs./sq. in.
Engine type	Four-stroke, OHV pushrod 90° V-twin
Bore and stroke	83mm x 78mm (3.27 in. x 3.07 in.)
Piston displacement	844cc. (51.5 cu. in.)
Compression ratio	10.2:1
Carburetion	2; 36mm Dell'Orto
Air filtration	None
Ignition	Battery and coil
BHP @ rpm	80 @ 7300 rpm (claimed)
Mph/1000 rpm, top gear	16.69
Fuel capacity	22.5 liters (5.94 gal.)
Oil capacity	3.0 liters (3.17 qts.)
Transmission oil capacity	0.75 liters (0.8 qts.)
Electrical power	Generator
Battery	12V, 20AH
Secondary transmission	Bevel gear
Gear ratios, overall	(1) 11.64 (2) 8.08 (3) 6.09
	(4) 5.06 (5) 4.37
Wheelbase	147 cm. (57.9 in.)
Seat height	77.5 cm. (30.5 in.)
Ground clearance	18.4 cm. (7.25 in.)
Curb weight	232.7 kg. (513 lbs.)
Test weight	307.5 kg. (678 lbs.)
Instruments	Speedo., Odo., Tach.; oil pressure generator indicators
Standing start 1/4-mile	13.075 sec., 103.21 mph
Average fuel consumption	33.6 mpg.
Speedometer error	30 mph, actual 26.50
	60 mph, actual 56.14





Some feel that the Guzzi would look better without its bikini fairing—but as a blast-deflector, it works.



The seat developed a tear at the base of the passenger kick-up; this was not unique to just this bike.



Lock mechanism is protected when the key is in your pocket. You'll need a Stillson wrench to budge damper.

MOTO GUZZI 850 LE MANS

As massive and dense as it appears to be, the Le Mans is actually quite light: 513 lbs. with a full load of gas and oil. The weight is carried low, which gives the bike a flick-ability and a neutral feel missing on practically all other big-displacement, high-performance motorcycles.

are not quite the same number of Guzzis on the road as there are Hondas, after all). What we do know is this: the staffer most familiar with the system is the staffer who liked it the best, and the more he used it the better he liked it.

The Le Mans engine is a wonderful, honest old campaigner: straightforward, simple, likeable and efficient with its plain-bearing rods, God-fearing pushrods, tappets and rocker arms that push, tap and rock in that old familiar way. A small plastic mini-lever mounted to the left rocker cover activates both carburetor chokes for cold-engine starts (assisted by a couple of squirts from the Dell'Ortos' accelerator pumps) and a short prod on the starter button brings the V-twin to shaking, hissing life (the shaking comes from the engine's low-speed thuds; the hissing from the choked cleanerless carburetors).

The Guzzi's automotive-style dry clutch releases cleanly whatever the circumstance or weather—much like the BMW's—and engages with a silky progression that's typical of Italian machinery. The rider faces a pretty good reach up to the clip-ons, which means that one must sit on the forward portion of the seat (*that's* why the back of the tank is padded) and ride knees-out semi-Roberts-style to keep one's knees from polishing the aft portion of the 850's rocker covers. The carburetors are nicely angled in and do not intrude, and the bellcrank throttle linkage permits the throttle cables to be routed out of harm's way.

At cruising speed the rider has four distinct impressions: the first is that there seems to be quite a bit of top-end engine noise and intake racket being generated close to each patella; the second is that the engine isn't working terribly hard (in fact at a corrected 55 mph the engine is turning just over 3200 rpm); the third is that despite its vestigial size the mini-bikini fairing is actually keeping some wind from your mid-section; and the fourth is that despite all the noise and the clattering, the 90° twin is a marvel of smoothness. What the rider feels when the throttle is turned is torque pulsing—the inclination of the whole engine to go one way as the exploding charge forces its crank and flywheel the other. This is not unusual on large-displacement, high-performance engines, and seems especially typical of Moto Guzzis, since the pulsing is not as successfully resolved into the chassis as it would be if the engine were mounted transversely. The pulsing is not unpleasant, and at constant, light throttle settings it goes away altogether leaving only a gentle, low-frequency resonance.

As flashbikes go, the Guzzi is acceptably painless on freeways and Interstates—as long you can get used to the traditional seating position. Suspension stiction is there to be sure, aggravated on the front end by the muted pounding

(Continued on page 129)

caused by the weight of two cast iron disc rotors and their robust alloy caliper assemblies; but even so, the 850 rates among its peers as high-average on the comfort scale. The seat is light-years beyond the typical flashbike upholstered oaken rail, and there is ample room behind for your favorite flash-ette. Footpegs are exactly where they should be for mountain-road streaking and a hair too far back for I-70. Matte-black plates keep the rider's heels away from the upper portion of the mufflers.

Twisty roads are what the Le Mans was designed for, and twisty roads are where it sparkles. The Guzzi's geometry and wheelbase are such that the bike has a responsiveness missing in the big Ducatis and a feeling of solidity that over the years has been refined out of the Laverda 1000. Its steering is neutral; the bike responds in a particularly linear fashion to turning inputs, requiring neither too much effort nor too little to initiate a corner or make the transition from hard left to hard right.

The drive train is very much a coordinated mechanism, free from the lash that makes so many Japanese motorcycles difficult to ride smoothly on challenging roads. Gear engagement is leisurely but positive—the second-to-third change was the only sticky one—and throttle response is exceptional once the rider learns to compensate for the linkage tie-up when the slides are dropped shut. It is unnecessary to chase the engine into its upper RPM range to elicit pleasing acceleration. The motor's displacement and 10.2:1 compression provide ample torque in the middle, and the middle is where the 850 seems happiest.

We were impressed by the Le Mans. There is no doubt that is a flashbike: it has clip-ons, semi-rearsets, no aircleaners, a lot of power, cornering clearance to burn, a jarring price tag, a red paint job, and it's Italian. But the bike gives you more of what you want and less of what you think you want, suggesting that Moto Guzzi understands the sporting rider possibly better than he would like to be understood. There are barely enough warts to satisfy the most demanding flashbike snob, none of sufficient consequence to genuinely dishearten him. The Le Mans is serviceable, reliable, maneuverable, comfortable within limits and workmanlike. It accelerates, handles and stops. You can get parts for it here and there, but you probably won't need many. There actually is a workshop manual, and a good one. You can carry a passenger. The mufflers muffle; the turn signals wink.

A dyed-in-the-wool flashbike fancier would experience the 850 and proclaim it too much an everyman's machine; a more reasonable enthusiast would ride the same bike and conclude that at least one Italian sport-bike manufacturer is finally getting the message. ●

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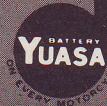
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