

**GIANT 10 PAGE SECTION**  
**COMPLETE GUIDE TO AMATEUR ROAD RACING**

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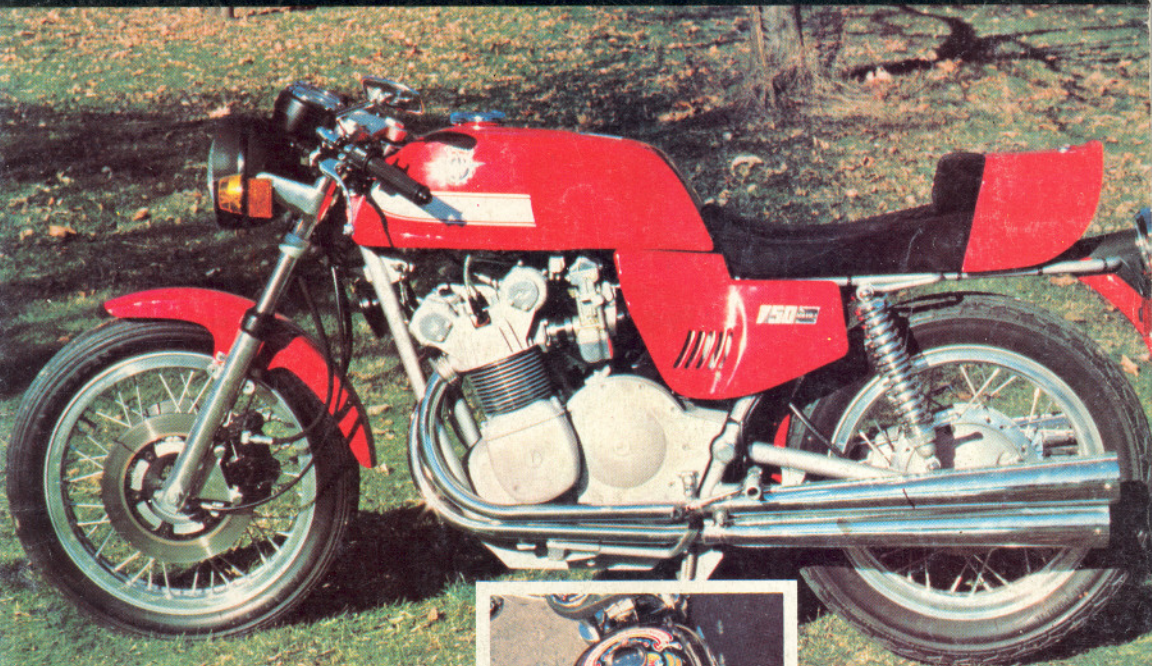
# **MOTOR** **CYCLE** **WORLD**

## **SUPER TESTS**

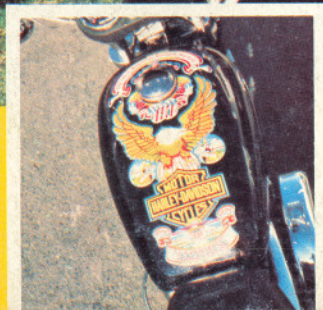
**MV AGUSTA'S \$6500 2-WHEEL FERRARI**

**THE OTHER ROTARY: HERCULES 2000 WANKEL**

**HARLEY-DAVIDSON "LIBERTY" SUPER GLIDE**



**How It Works:**  
**Desmodromic**  
**Valve Gear**



**Crash &**  
**Burn**  
**Stuntmen**



**Transcendental experiences  
needn't come from  
meditation alone.**

■ If you believe in the adage "You get what you pay for," then you may automatically assume that the MV Agusta 750 S America is the best motorcycle in the world. At \$6,500, it is the most expensive motorcycle you can buy. But "expensive" and "best" do not necessarily fit into each other's shoes.

First, consider this notion of "best." Motorcycles are specialized. Each type handles some tasks better than others. The obvious example is the motocross machine and the tourer. Each is designed for a specific function. A motorcycle designed with broad capabilities,

such as dirt and street riding, generally will not perform as well as the bike tailored for either dirt or street.

The distinction gets finer still when you consider that street bikes can be classified as commuters, tourers, sports and super-sports. Then there are the all-out racers.

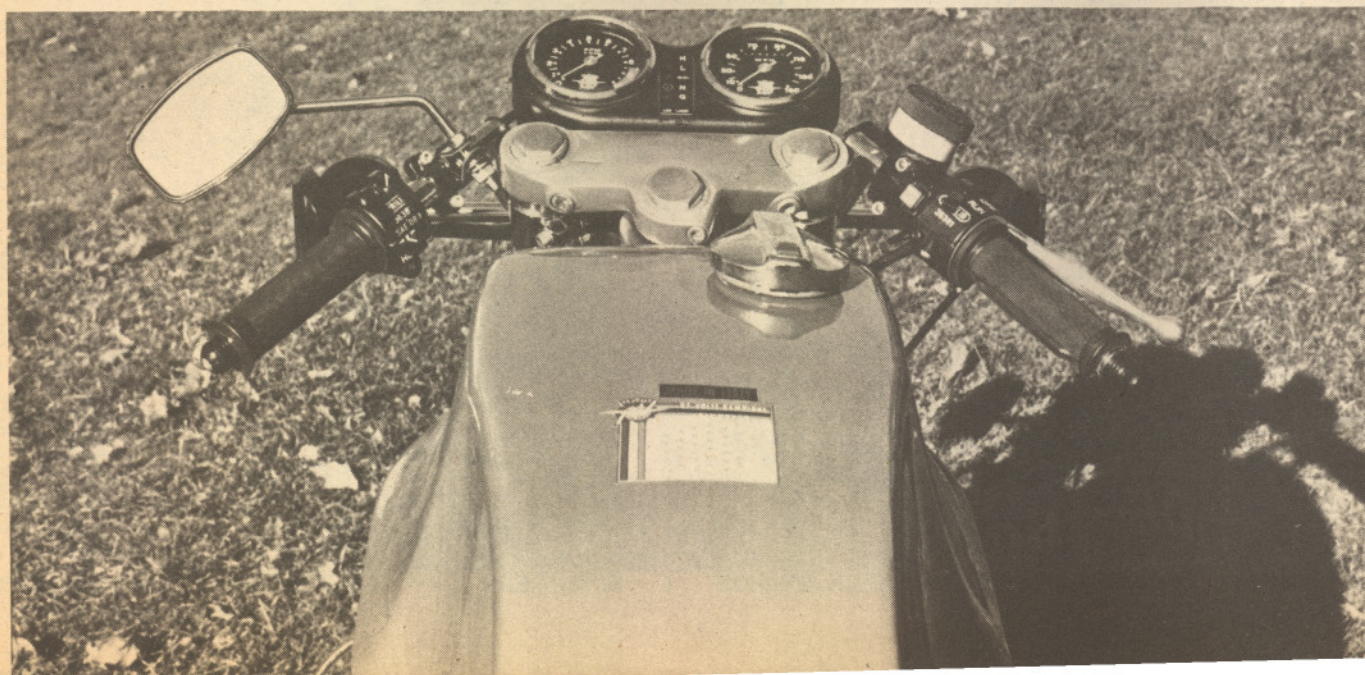
Aside from fulfilling a rider's transportation and/or recreational needs, a bike, like any other material possession, can fulfill a rider's (or even a non-rider's) psychological needs. There are people who collect motorcycles, and the reasons for an acquisition will run the gamut from a bike's charisma to the fact that it features something that very few other people can obtain.

Not many people will be able to acquire an MV. Aside from the fact that it costs a large heap of dollars, the total annual production of this year's model is

only 200 units. That's a very small number when compared to the millions of motorcycle enthusiasts throughout the world. On the other hand, 200 is a very fat number when the bikes are all sitting in Chris Garville's warehouse in Elmsford, New York.

That the MV Agusta is unique is beyond question. Limited production, if nothing else, guarantees exclusivity. But exclusivity alone does not sell motorcycles.

Statistics help to sell motorcycles. The stock bike with the lowest elapsed time in the quarter-mile will always bag a couple of percentage points on that item alone. The MV has its quotient of good numbers, but that is not what sells this bike. It goes beyond the clicking stopwatches, digital readouts, needles arcing across numbered dials. It is a magnetism that eludes the engineer's





world of precise instruments and calculations.

The MV is a racing bike in street clothing. Its blood relatives have more Grand Prix championships notched on their handgrips than any other marque. The year 1975 was the first in 17 years that MV did not take the trophy. A prerequisite of winning races is sticking together, and MVs simply do not come apart. Or break. It is common for one of the competition machines to race an entire season without having to be unzipped. The street version can be wound out in top gear and held there, like a Volkswagen. All you do is provide a suitable road.

Driveline components are crowbar-strong. The crankshaft fits into its own webbing, which bolts into the lower case. Unusual, and expensive. The engine and transmission are a goldmine

of bearings. The crank runs on huge balls at either end and is supported by split-cage roller bearings at points along its length. Gears cut directly onto the crank drive the double overhead camshafts via a set of three matched gears running on ball-bearings. Another gear on the crank transmits primary power to the clutch. All gears are straight-cut for maximum strength. No slop, no play. But noisy. The engine has been designed for quick maintenance—a necessity with racing machinery when a race can be won or lost in the pits. Cylinders are individual units rather than cast in block. The engine can be stripped to the bare cases without having to remove it from the frame. The gear arrangement allows easy removal of the camshafts without the hassle of breaking a cam chain. Valve adjustment is thus simplified as cam lobes operate directly on

valve stem cups, and the cams need to be lifted to insert shims. The arrangement is similar to the Z-1, except that the shims are inserted underneath the cups.

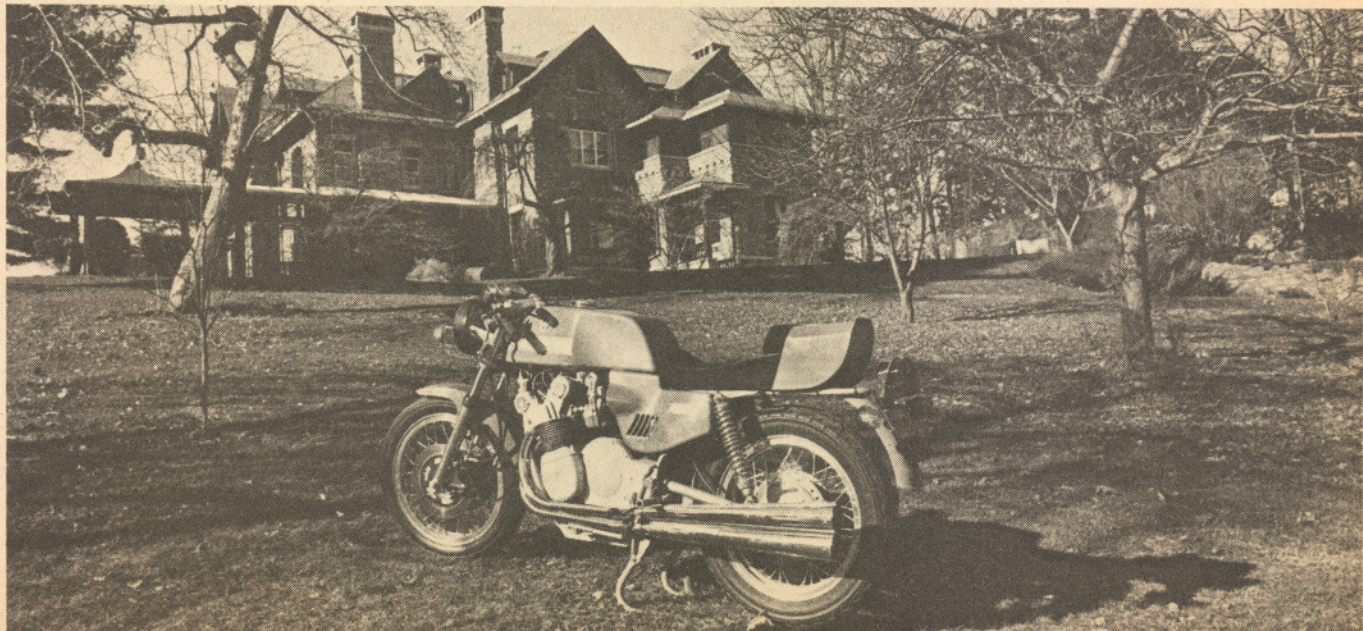
Carburetion is via four 26mm Dell'ortos, all of which fit into a single housing. It is a simple matter to remove the housing, and the carbs come off with it. A plastic air box with an easily accessible filter adds to engine life, but the hot setup is to run with air intake velocity stacks and an open exhaust. Each bike comes with two exhaust systems as standard equipment. This quiet system is claimed by the factory to impose only a small penalty in horsepower. But there is no question in our minds that the *fortissimo* system is more in keeping with the overall concept of the motorcycle. It's the only way to go.

The sound of the MV is second to none. Flip the key (located under the

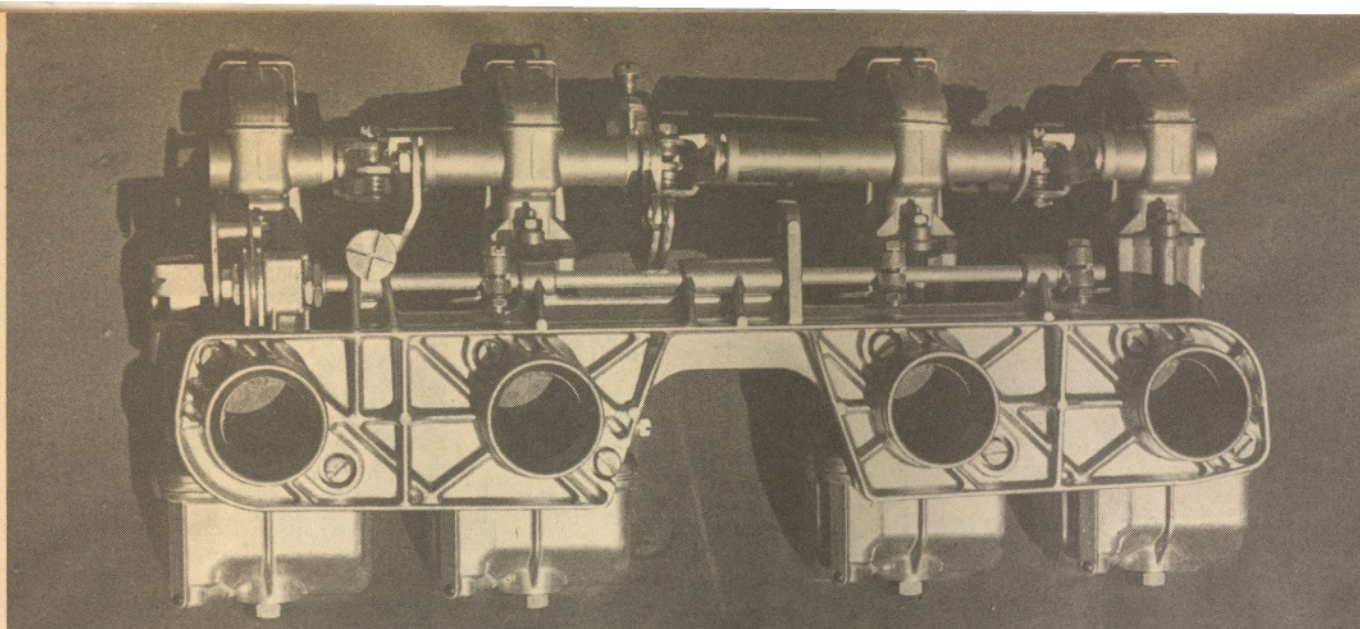
# MV AGUSTA

## 750 AMERICA

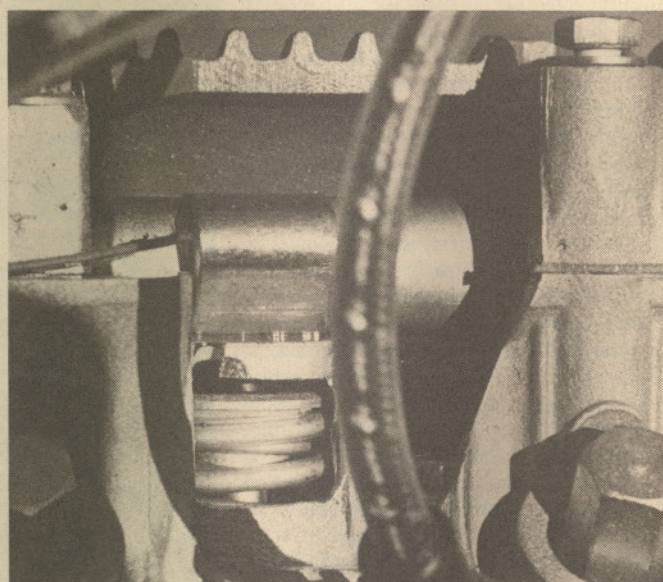
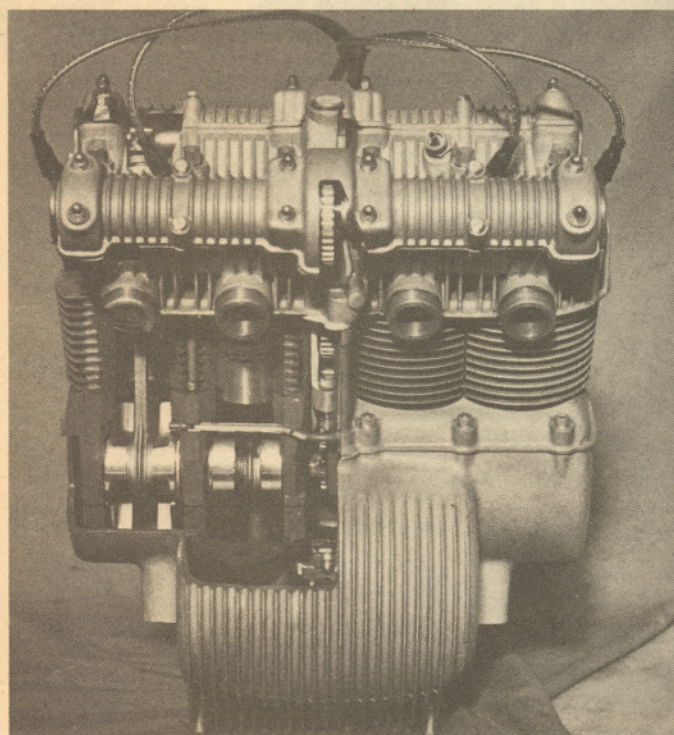
# ROAD TEST





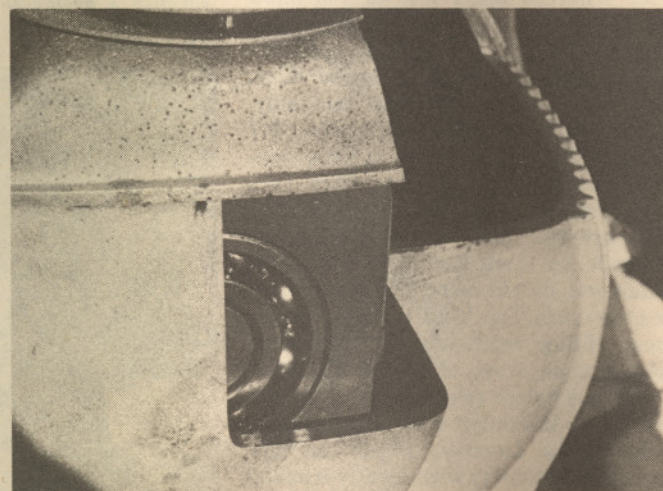
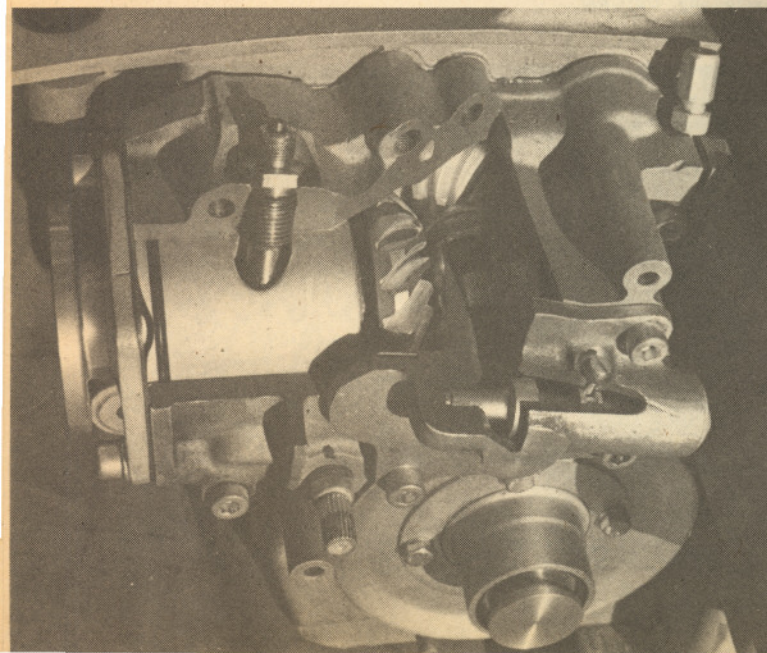


*Four 26mm Dellorto carbs mount into a single assembly for easy removal. The throttle action is the single cable racing type.*



*The cam lobes ride directly on valve stem cups. Adjustment is done by placing shims under the cups after the camshaft is removed.*

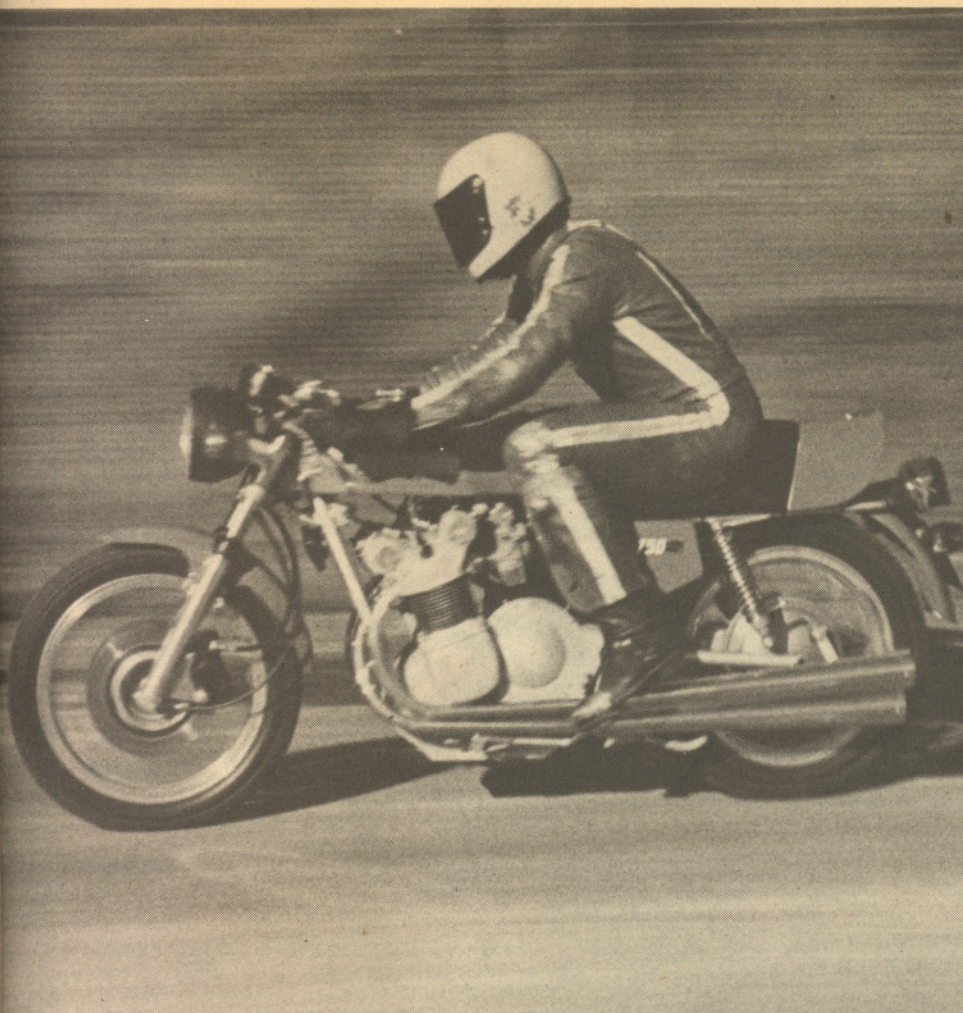
*The crank fits into its own webbing, which bolts into the lower main case. The camshaft is gear-driven.*



*The final drive is by gear and shaft.*

*The ends of the crankshaft ride on massive ball bearings.*





over on the bumps. The MV also had a better overall feel.

The biggest advantage of the MV on the street is its gearing. The Laverda and Z-1 will walk away from it off the line. The high gearing comes into its own above 80 mph, at which point the MV will blow off the competition. The shaft drive (a trade-off of unsprung weight for reliability) can be fitted with an optional lower gear ratio for more urge off the line. Painstaking engine design, especially cylinderhead flow characteristics, has this engine pumping out horsepower on a par with 900s and 1000s. And the torque, for a multi, is tremendous. The power is all there from 3,000 rpm all the way to 9,500 and higher. With the high gearing, the clutch is in for a hard time with rapid starts. The MV's clutch is foolproof. Easy lever pressure is combined with positive engagement and an absolute refusal to slip.

The front brake is outstanding. It is a dual-disc arrangement manufactured by Scarab. The calipers each have dual pistons. The feel is progressive and predictable; there is no mushiness whatsoever. At 70 mph you could lock up the front wheel with two fingers. It's the closest thing to power brakes on a motorcycle. The feel is accurate enough to allow you to snap on enough anchor to just under the lock-up point with

*(Continued on page 61)*

*If your taste runs to the MV Agusta, it helps if you're rich.*

#### MV AGUSTA 750 S AMERICA

Price .....	\$6500
Warranty .....	6 mos./4,000 miles
Distributor .....	The Garville

#### ENGINE

Type .....	four-stroke dohc four
Displacement .....	788cc [40 cu. in.]
Bore & stroke .....	67mm x 56mm [2.6 x 2.2 in.]
Advertised c.r. ....	9.5:1
Carburetion .....	4 26mm Dellortos
Overall gear ratios	
First .....	11.84:1
Second .....	8.40:1
Third .....	6.36:1
Fourth .....	5.52:1
Fifth .....	4.97:1

#### RUNNING GEAR

Frame .....	double cradle steel tubular
Suspension .....	hydraulic telescopic fork [f] swing arm with shock absorbers [r]

#### Tires

front .....	3.50-18 Metzeler
rear .....	4.00-18 Metzeler

#### Brakes

front .....	11" dual disc
rear .....	7.8" sis drum

Electrics .....	Bosch Dynastart 135W, automotive-type distributor, battery/coil, points
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#### GROSS MEASUREMENTS

Weight .....	518 [dry]
Wheelbase .....	52.7 in.
Seat height .....	31.5 in.
Ground clearance .....	6.3 in.
Fuel capacity .....	5 gal.

#### COMFORT RATING

1. Vibration .....	9
2. Suspension .....	9
3. Noise level .....	6
4. Seat .....	8
5. Handlebars .....	7
6. Start mech. ....	10
7. Controls .....	9
8. Stand .....	9
9. Shift mech. ....	8
10. Switches and Instr. ....	8
Overall rating .....	83

#### PERFORMANCE

1/4 mile .....	13.12 sec.; 105.8 mph
0 to 60 mph .....	5.1 sec.

#### SUMMARY

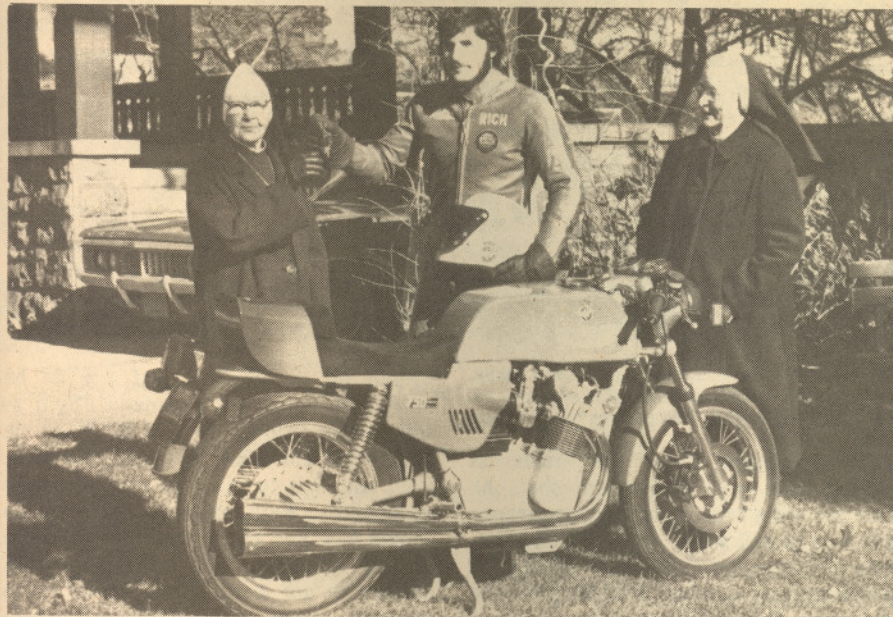
A true racing bike for the street. Chances are that you'll find your limits before the bike will, but it's easy to get in over your head. A thoroughly satisfying motorcycle.



# MV AGUSTA

(Continued from page 21)

consistency. The rear brake is a drum unit which showed signs of fading after heavy use. Gear shifting is satisfying. The short-travel lever snapped through the cogs with crisp sureness. Finding neutral is a hassle due to the heavy spring on the neutral detent button. The advantage is that you're not going to waltz into neutral very easily in race riding.



At low speeds the bike has a heavy feel. More than 550 pounds (wet) are working against you, and so are the short bars. The front end is kicked out more than a Z-1, which aids in high-speed stability but doesn't do wonderful things at the other end of the speed spectrum. The heavy feeling quickly disappears as the speed starts to wind. The bike is very narrow; there is no alternator running off the crank to

extend case width. Instead, a Bosch dynastarter (combination starting motor and generator) is mounted underneath and behind the engine and driven with a dual-belt arrangement.

Components not produced by the factory can be purchased from other leaders in the field. The shopping list includes Ceriani forks, Tomaselli clip-ons and Borani rims.

Quality control is of the highest order. MVs are consistent. When you've ridden one, you've ridden them all. This isn't at all surprising when you consider that the primary source of income for the parent company, Meccanica Verghera, is the manufacturer of helicopters, and the

firm is under license to produce Bell and Sikorsky choppers. The motorcycle division is the plaything of Dominico Agusta, the head of the company. Agusta, a bike enthusiast, decided to "roll his own."

We think the current product is a rare blend of the strong and the exotic. It provides a trip in motorcycling that is second to none. And if you don't believe us, just ask Sister Veronica.

# INDIAN

(Continued from page 55)

handling was less than impressive. The Horex-Zundapp engine looked good to him, so he approached the Zundapp management with his idea for a new Indian. Floyd had little trouble in selling the idea to Zundapp, and the factory quickly built an engine for Clymer to send to the Tartarini shop in Italy, where a proper frame would be designed.

The only change made to the engine was to replace the cast-iron cylinder

with an alloy part and then push the thing out to 600cc. Clymer was an American, and we Yanks have always had the idea that anything big has to be better than anything small, but perhaps more significantly, Floyd saw that the era of the superbike was coming.

How they got the 600cc is not known. Paul Watts of Fresno, California, owns the Indian-Horex, along with a Munch Mammoth and the Clymer-Indian 45-inch prototype, and he says that the cylinder was merely bored out. That would have made a horribly oversquare engine, however, so perhaps a new crankshaft was also made in the process to get the 600cc.

When Tartarini built the bike he used  
(Continued on next page)

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