

HONDA CR480

Ten rounds for the heavyweight title

□ *PROLOGUE:* Japanese motorcycles have been burying their competition over the last ten years, and much of the shoveling has been done with nary a whimper from the smaller, poorer, and less adventuresome European motorcycle companies. The 125 class fell to Japanese domination in 1973. Total invasion of the 250 class was completed by 1977. Now the Japanese are knocking on the Open class bastille, and they are knocking with a ramrod.

THE LAST CHAMP: Maico was the last European Open class bike to hold the title of Bike of the Year. The year was 1981. Maico introduced the concept of big, bigger and biggest bores with the 1981 490, and its broad, torquey and smooth power was awesome in light of the competition from the brands across the Pacific (465 Yamaha, 450 Honda, 465 Suzuki, and 420 Kawasaki). Maico handling paired with the motor of the year made the 1981 Maico king of the hill.

THE NEW CHAMPION: In 1982 Honda took over the top spot in Open class warfare with the CR480. It was light, powerful, good handling and suspended adequately. Honda's work to gain the best Open bike of 1982 was made easier by Maico's miscalculations in powerband and consumer demands. The 1982 Maico 490 was a good bike hampered by 25 pounds of excess suet, a too low powerband, and a shock that snapped with the regularity of crackle and pop.

A REMATCH: Hondas had the glory. Will they give it up? Maico lost the crown. Can they regain it? Did the Japanese improve on their success, or have the Germans learned from their mistakes? Maico 490 (488cc) versus Honda CR480 (472cc)—a heavyweight championship of the world.



W SHOWDOWN

vs. MAICO 490



WHO'S GOT THE KNOCKOUT PUNCH?

Rumor mongers and payroll admen will tell you that each bike is the fastest thing this side of Don Garlit's Swamp Rat, but when the chips are down, both bikes are a tossup in the horsepower department. This parity on paper, or in a straight line, doesn't work out to an even-steven showdown on the track. Honda has a slight advantage over the Maico in get-up-and-go. The CR480's crisper low end, quicker rev, and hard-hitting mid-range make it the Open class machine for massaging a motocross track, while the Maico's engine runs a close second.

Maico has a strong mid-range that is broader and longer in pulling power than the Honda's, and has usable top-end revs. Maico's power is impressive, usable and well placed, but it is hampered by its deficit of low end (compared with the CR480) and a relatively flat top-end power curve. Paradoxically, the Honda doesn't have any top end, but it does have a five-speed tranny that it can tap-dance on the horsepower hump to rocket the Honda to increasingly blurry extremes. Maico has a four-speed motor with a broad mid-range, and although blessed with the ability to rev, the oddly spaced gear ratios demand more low and more top than the German titan can deliver.

Honda's power is quick off the bottom, violent in the middle and signs off on top. Maico is chuggish down low, excellent through a broad mid-range and soft in the upper ranges (it does rev, but without the authority of the past).

In a first-turn drag race a Maico might win, but it suffers from the worst case of *wheelie-itis* we have ever experienced. When the light-flywheeled CR480 is hooked up and tracking, the supposedly torquier Maico is clawing air with the front wheel. When we kept the Maico down it ran even with the Honda, but we only kept it down three



Two years ago riders would have been crazy to pitch an Open bike into the air like a 125. They still are, but now they live to babble on.



With an ultra-light front end, the Maico likes to take off without any warning. The 490 pops wheelies without getting clearance from the control tower.

out of ten times. We were surprised because we felt that given the running gear, component weight and power-band characteristics, the Maico should have been out of the hole first every time, while the Honda would have to run it down from behind with its fifth gear. Ah so, not so!

DID HONDA COPY THE FABLED HANDLING OF MAICO?

Maicos have always been the best-handling motocross bikes in the world. Throughout the years they have turned on a dime and given back nine cents in change, carved flawlessly through berms, inside lines and on the high bank of off-cambers, while being the most forgiving jumper in the air (short of the Goodyear blimp).

Honda, on the other hand, has had a checkered career of producing snowplows, corkscrews and twitchers

of ill-repute during the hectic ten-year history of its involvement in motocross.

Which bike handles best? Honda. What does it handle like? A Maico. What does the Maico handle like? A bike that is harmed by excess height and minimum suspension.

First off, the Honda is light (227 pounds), has a steep rake (26 degrees) and the weight is low in the frame. For an Open bike, the CR480 is as light as Maico's 250, and a solid seven pounds shy of the Maico 490's weight (234 pounds).

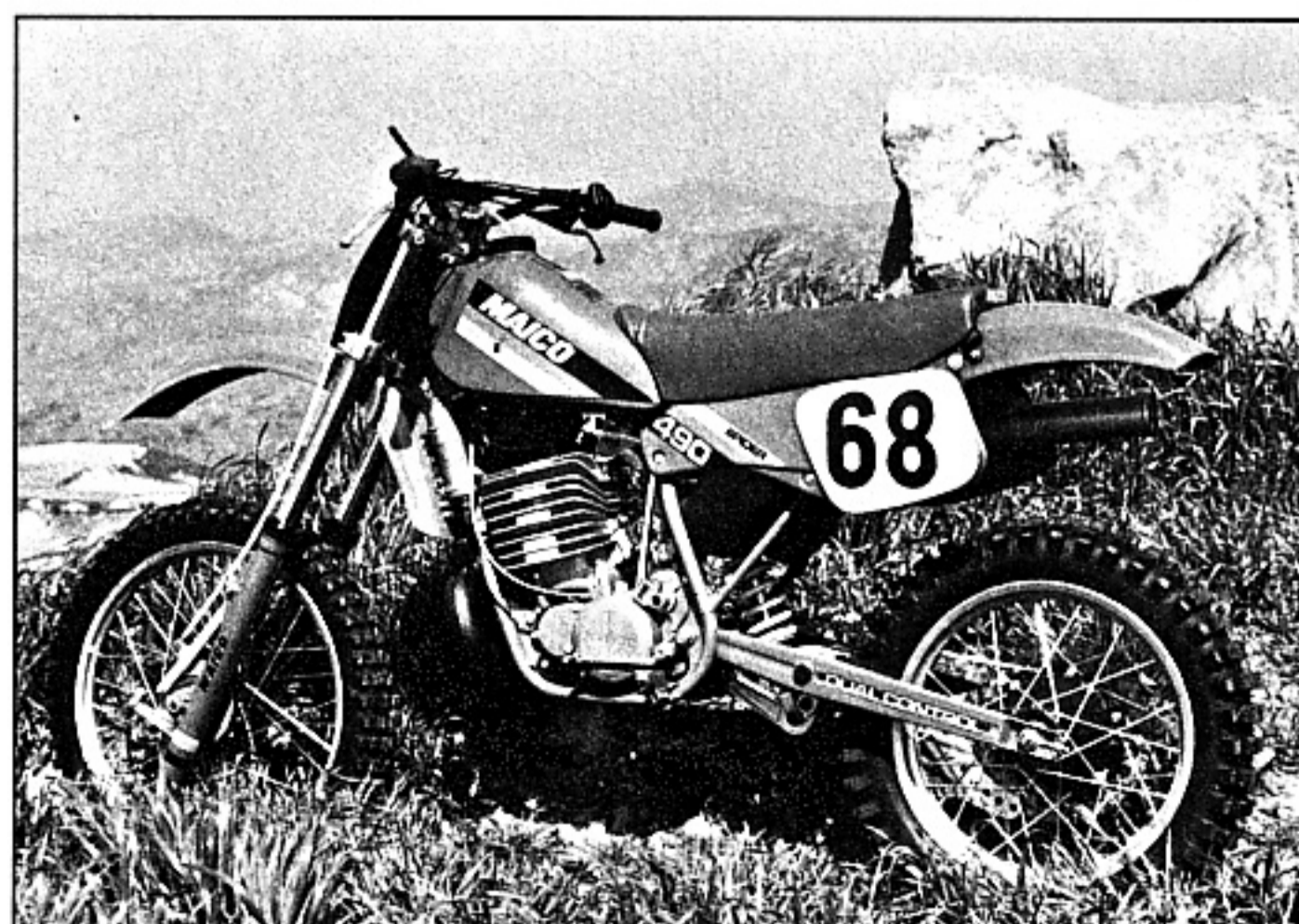
When you have a high-horsepower, low-weight and quick-handling package sitting between your legs, it doesn't take a calculator to figure out what is going to happen. The Honda *demand*s to be ridden. It carves tight arcs, which are perfectly suited to its explosive mid-range power, and it gets

busy on fast straights, in keeping with its 26-degree rake; but from the tightest hairpin to the fastest straight, a Honda rider is living life to the fullest. Not perfect, but blessed with enough stability, carving-knife steering, and a flick-it-around riding style to make the Honda CR480 about as 250ish as an Open bike can get.

Maico handles like a Maico, but one that took drugs at birth. With a nose-bleed seat height, imprecise steering, a tendency for the front end to wander at speed, and a reluctance to balance out, the 490 is as close to riding a stepladder as an Open bike can get. To get the bike to assume a predictable handling characteristic, our test riders tried to make the front end dive into the turns; and while the big 490 was a ready dive bomber, this tactic didn't bring about precise turning,



At a feathery 227 pounds the Honda CR480 glistens with details generated in Roger DeCoster's brain and Magoo's wrist.



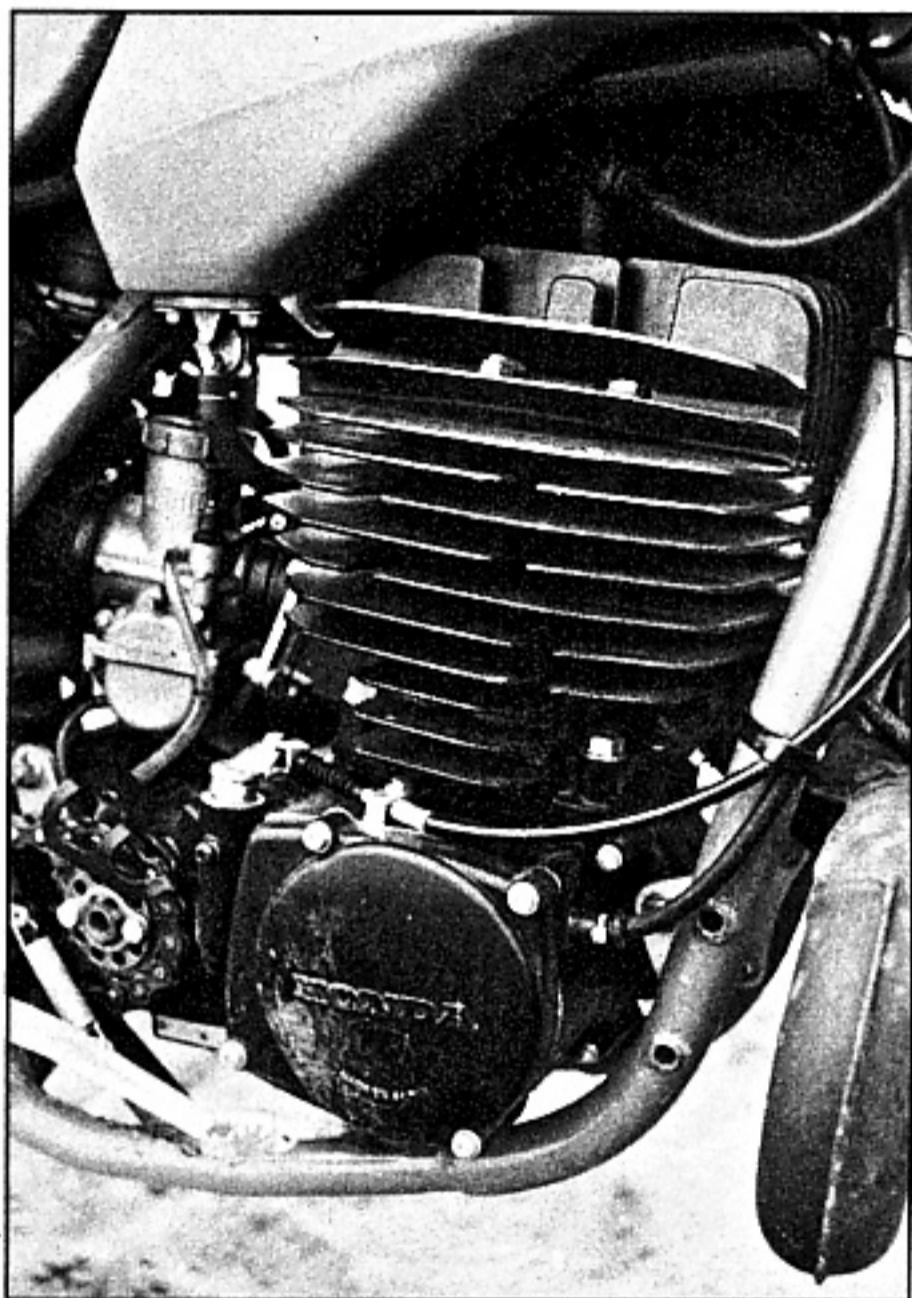
With a new powerful motor, cleaned-up looks and 234-pound weight, the Maico 490 highlights European willingness to keep in touch.



Honda had the best Open class racer last year, and it had lots of flaws. This year the flaws have been fixed.



Maico had the best Open class bike in 1981. Getting the crown back will require more effort in handling and suspension.



Honda's 89mm x 76mm bore and stroke motor displaces 472cc's of hard-hitting and manageable horses. With its five-speed box and quick rev, the CR480 is the optimum big-bore powerband.

and really aggravated the wheelie tendency coming out of the turn when the pressure was relieved. In addition, the poorly designed seat would act like a water slide off the rear of the bike. A rider spends his time holding on, holding down and holding his own on the Maico. It left the impression of being built at the Maico factory, but by no means does it hold up the famous handling tradition.

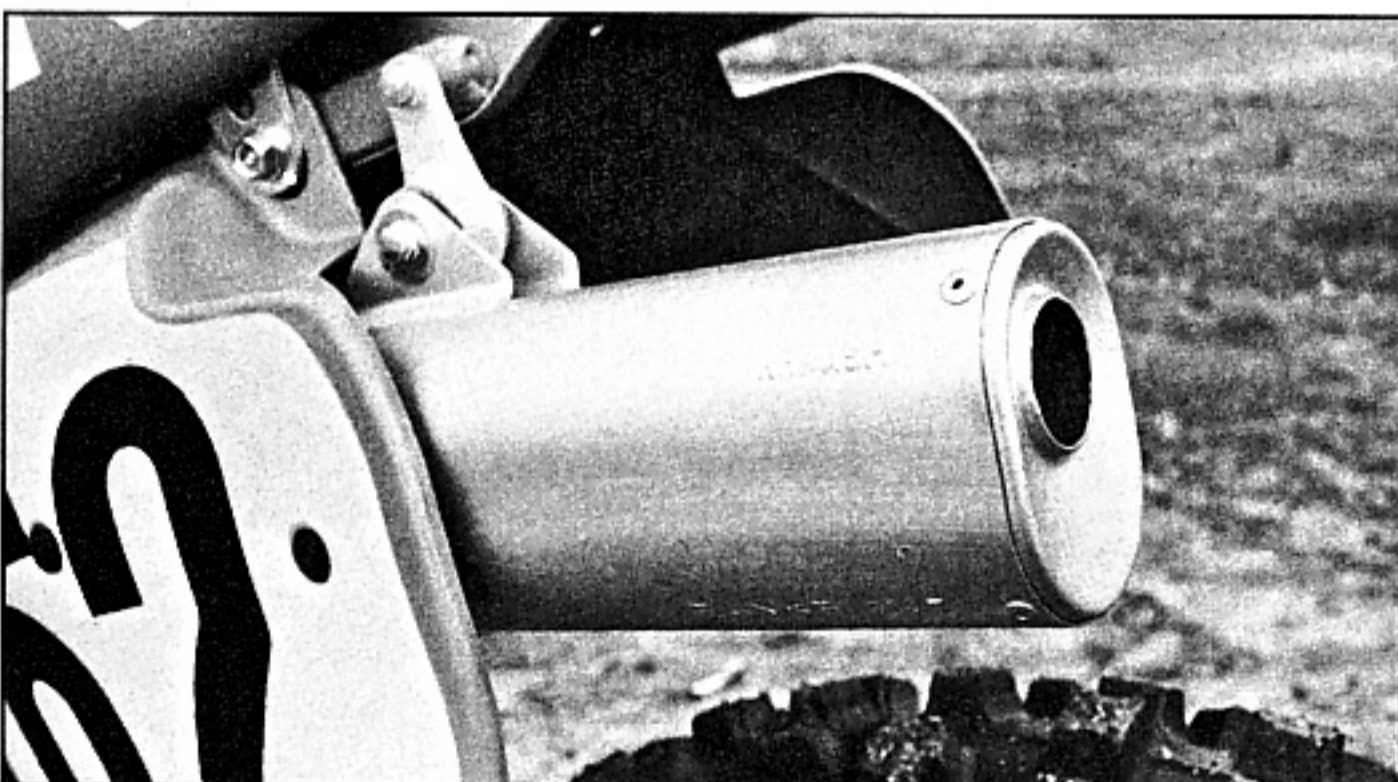
DID MAICO COPY THE HONDA REAR SUSPENSION?

While Maicos have always been the best-handling motorcycles ever made, they have also always had the worst rear suspension. What saved Maico back in the old two-shock days were super forks. Honda never had super forks, nor a reputation for building rear suspension worth wasting paper to write home about. How times change!

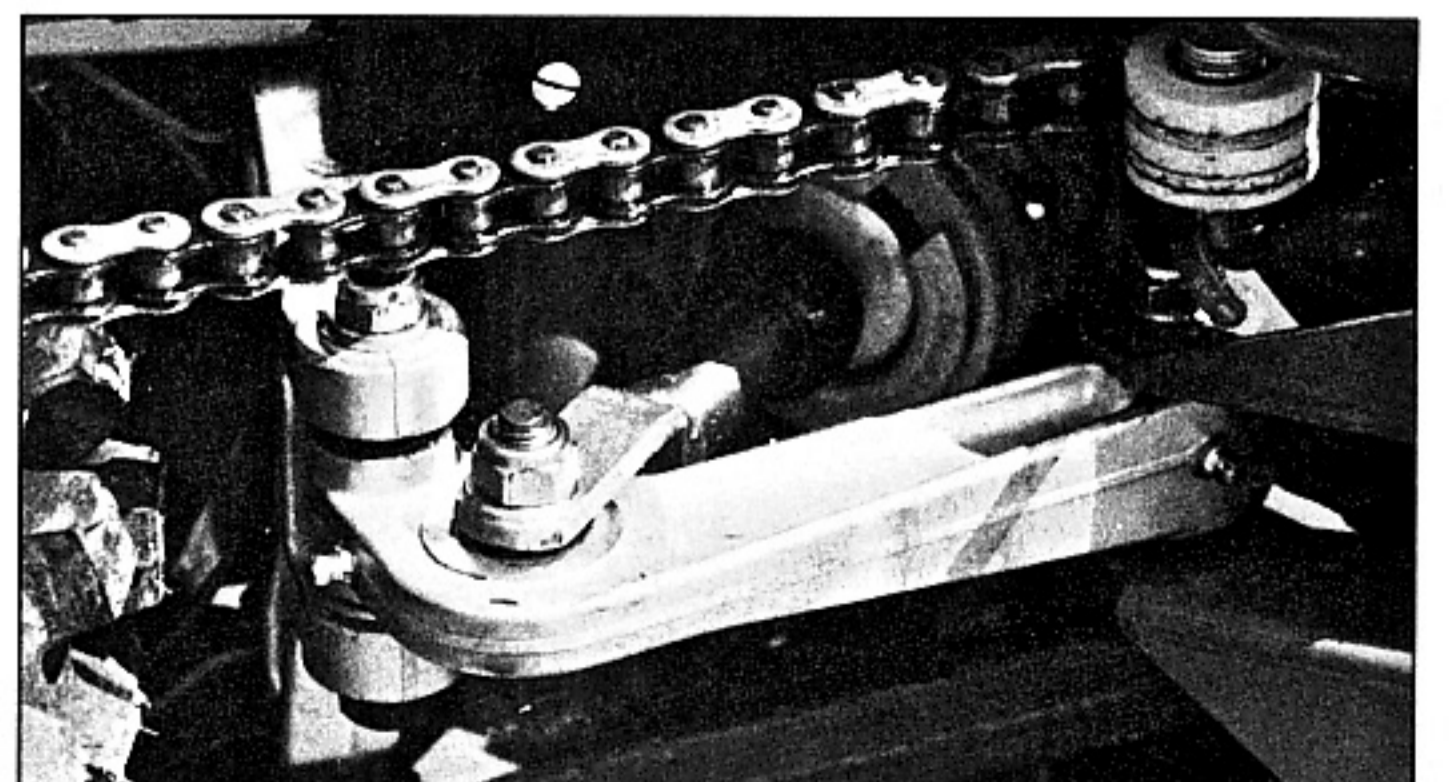
On the front Maico has its own design 42mm forks, and to its credit Maico updated the damper rods to last year's California hot rod specs. The Maico's forks need a stiffer spring than what comes stock, but as a hit-or-miss



Although more violent than in the past, the Maico is still a broad mid-range powerband. Maico's 86.5mm bore and 83mm stroke reed-valve motor is fed by a 40mm Bing.



The world's trickiest production silencer comes on Honda, but watch the bracket that clamps it to the stinger, because it isn't the world's strongest.



Maico's rising-rate linkage features all-new leverage ratios from last year, and comes with grease fittings at each end. Good touch.

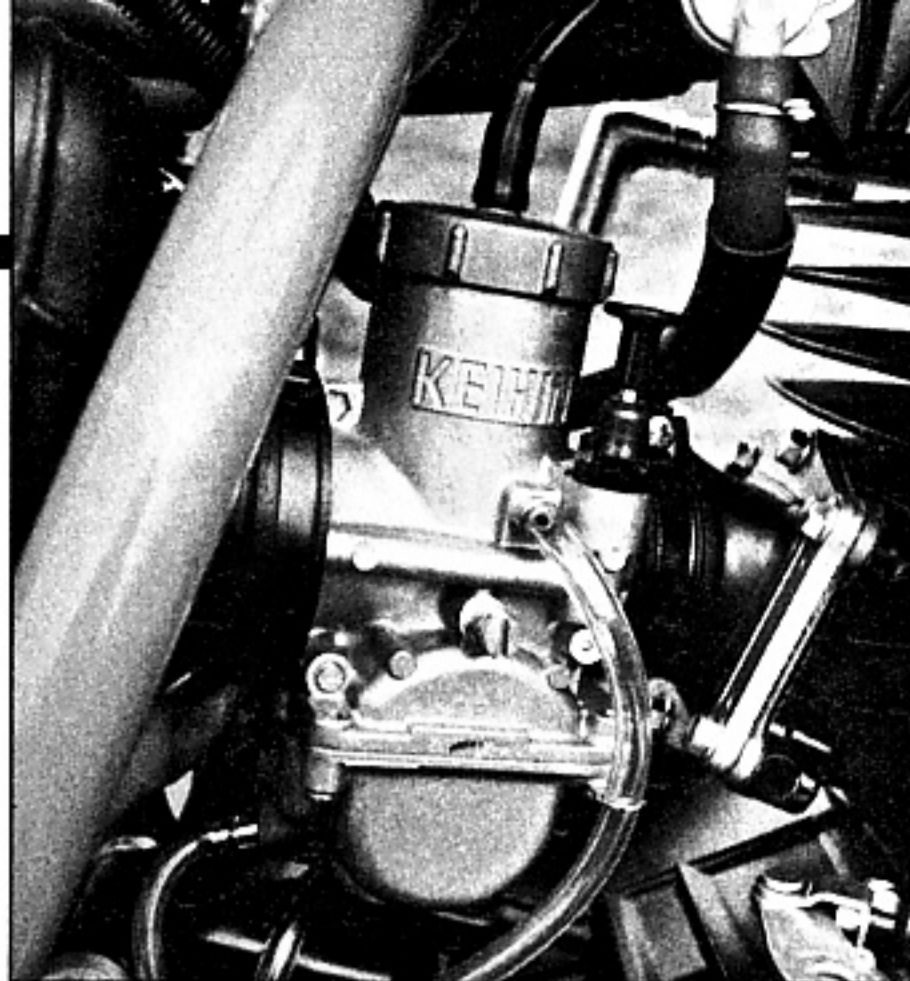
HONDA 480

solution (by modern technological standards), they need about six pounds of air.

Honda, on the other hand, uses 43mm Showa forks on the 480. No air is recommended and the Honda forks are better than the Maico forks in box-stock condition, and this is without mention of the adjustable compression damping and accessory springs that are available. In comparison with Showa's ultra-smooth fork action, adjustability and tuneability, the Maico forks do not even have an oil drain hole or thread-on fork caps.

Maico's rear suspension design isn't close enough in fact to be considered a Honda copy, but in theory it is close. The Honda rear suspension is good, offers compression and rebound adjustment, and is hard to fault for a stock component system. Spring rate, clickers and feel are first-rate on the Honda. Set up carefully, the Honda rear suspension is good enough for anyone, even the pickiest Pro.

Maico may have taken a close look at the Honda Pro-Link design when they sat down to draft their rear suspension, but somewhere between the drafting table and starting line the



Honda's 38mm Keihin carb came a smidgen rich (drop to a 175 main) and always required a good blast to clean it out.

process got the short shrift. The stock spring is too soft. The shock needs better valving, better spring rates, and is as much responsible for the bike's poor showing in the handling categories as it is in the rear suspension analysis. With proper preload there is excessive sag eating up the small-bump travel, which causes the shock to sit on a stiff hump of spring and leverage that makes it harsh over little bumps, but the Maico still bottoms on the big ones.

To Maico's credit, it has been updating the suspension components as



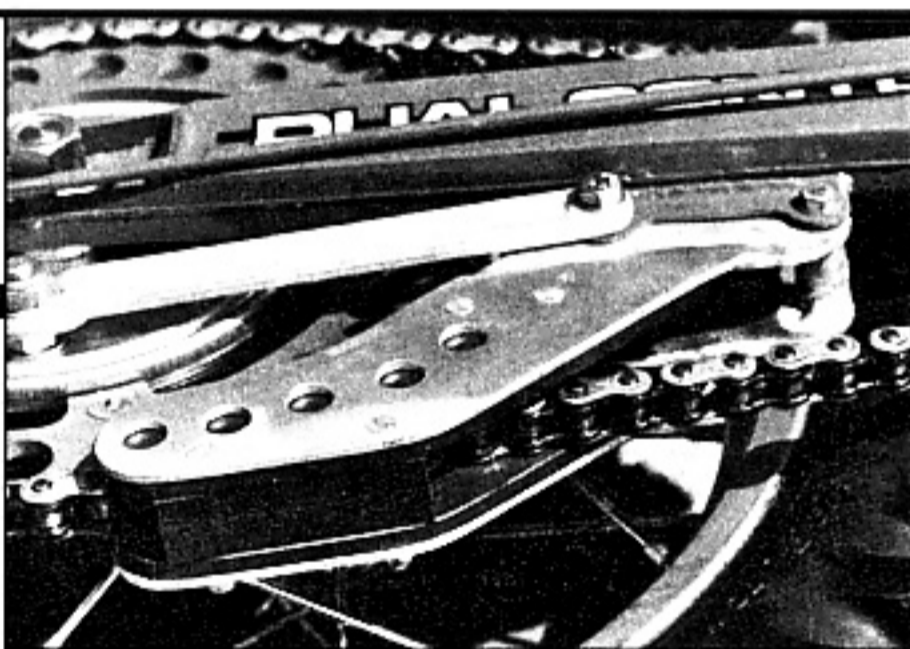
Honda's handling is quick and precise. This is in spite of its oddball 26-degree rake, which should make it turn inside of the rider's boot and ram its own footpeg.

each group of machines rolls down the production line. We contacted Maico about our problems, and they informed us that in-line changes were being made and that our bike would handle better if the suspension units were brought up to date. Maico recommended six changes which would improve the handling, suspension and performance of the 490. First, replace the stock 7.9 kilo spring with the optional 8.3 kilo coils to lessen the sag of the rear suspension. Second, late-production models will come stock with 3.2 kilo linear rate fork springs, which



Maico's handling is hampered more by bad suspenders than out-of-sync geometry. Seat height is almost 40 inches, and this is atrociously tall.

are stiffer. Add these to our soft front forks with five-weight oil (measured six inches from the top) and no air. Third, change the stock 15/56 gearing with slightly taller 13/48. This lessens the wheelie problem, keeps the rear sprocket from derailing the chain in ruts and slightly improves fourth-gear speed. Fourth, drill holes in the airbox to allow it to breathe better. Fifth, replace the aluminum clutch plates with newly designed steel plates. The steel plates help eliminate clutch problems. And finally, toss the Pirelli tires in favor of four-ply Metzlers.



Early Maico 490s came with plastic chain guides that exploded like popcorn. New aluminum guides are now coming on late releases.

Maico assured us that the factory is working to cure suspension and handling problems (which we feel are totally related to one another) before the bikes leave the factory.

HITS AND MISSES

Honda needs to toss the Bridgestone M32/33 tires and mount M22/23s, Dunlops, Metzlers (wouldn't that be a shock) or anything that works. Change the Keihin's jetting from the stock 180 to 175 or 172 (your jetting may vary depending on how you drive and the whole EPA song and dance). Under the Honda's blue seat lies some ultra-soft foam that will break down in time, and Honda needs to get better material next year.

Honda's brakes this year don't seem as good as last year's, but they are better than the Maico's. The Maico's front brake was poor, but the non-

MAICO 490

floating rear was good. Honda's front and rear were both good, but not class-winning caliber.

Maico needs to lower the seat height, get a seat cover that fits (ours looked like Charlie Chaplin's pants), toss the overweight Magura 312 throttle, put some teeth on the brake pedal, get levers that are easier to grab, make front wheel removal easier, and lose ten pounds.

Nice touches on the Maico include the compression release, which makes the Maico an easy starter compared with the high and awkward Honda kickstarter. The 490's silencer is aluminum, although large. Clutch action was the lightest ever for a Maico, and the new graphics are odd but interesting.

Honda bristles with nice touches from its aluminum silencer, kickstarter, rear brake anchor arm, steering stem and swingarm to its excellent cables, double-leading shoe brake linkage, two-piece pipe and silicone-smooth throttle.

AND IN THIS CORNER, THE WINNER!

In the red trunks with blue trim... the Honda CR480, by a knockout! □