

# HONDA CR500R

What are the three little things?



*Landing from dropoffs will quickly show up the weak points of the rear suspension. The spring is too soft and the shock fades too quickly.*

□ Honda's new CR500 is rapidly developing a controversial reputation. Built on the success of the 1983 CR480, the larger-displacement '84 was heralded before its release as the ultimate, awesome, earthquake machine. Gobbled up in droves by an eager racing public as soon as it hit the showrooms, what everybody babbled about was horsepower. Then, as the numbness wore off, the grumbling started about the CR500's shortcomings.

#### WHAT ARE THOSE MAJOR FLAWS?

Three problems have cropped up to cause the admiring throng to turn a little cool. First, stock jetting on the 38mm Keihin is as mysterious this year

as it was last year. One day it's too rich, the next day it's pinging, and then back to a blubber with no warning. Secondly, starting the CR500 is a job for Paul Bunyan and Babe the blue ox. Most four-strokes cooperate with a starting drill better than the CR does. Finally, the rear shock spring is too soft, and the resulting effect on handling and performance narrows the rideability range.

#### WHAT HONDA TRIED TO DO

In 1983 the CR480 was the best Open bike around. It had good handling, passable suspension and a strong but abrupt powerband. Honda wanted to widen the spread of power, increase the horsie rating, and make

the motor more tractable. These were all valid goals, because last year's CR480 hit too hard, too low and signed off too quickly. It was good, but more like a powerful 250 than a tractorlike 500.

#### WHAT WERE THE FIX-IT POSSIBILITIES?

Last year's hot-rod Hondas were running different ignitions with more flywheel weight. The extra weight increased flywheel inertia, lessened the motor's tendency to stall when the brakes were applied, and smoothed out the powerband. Did Honda add more weight? No.

Roger DeCoster said that adding more weight to the crank and flywheel wouldn't be the best thing to do. The quickness of the power would be lost, braking effectiveness decreased and horsepower lessened.

#### WHAT DID HONDA DO THEN?

Honda took the available weight and moved it outward to increase inertia. While the running gear inside the lower end weighs the same as last year, it is dished out so that the weight is placed farther away from the center of rotation. Much like a spinning figure skater, the positioning of weight outboard increases the centrifugal force.

That's the whole cookie! It doesn't have more weight, but it does have more inertia.

#### WHAT DOES IT ALL ADD UP TO?

Honda's new CR500 motor, made up of a 3mm longer stroke than last year, is a heavy metal blaster with excellent bottom end that pulls steadily into an incredible surge of mid-range power. For Roger DeCoster, Hakan Carlqvist, Magoo, or any of a host of World class competitors, the CR500 is in the ballpark. But they don't play in the same league we do. For the average Intermediate-level Open class rider, the 500 is too much power. Not too much in terms of freaky, uncontrollable or frightening, just too much.

# CR500R

The human body isn't strong enough to control the Honda's horses. On the Honda the rider is only along for the ride.

### WHAT DO YOU HAVE TO DO TO WIN ON IT?

If the motor is isolated from the frame, suspension and components, you have a motor strong enough to slip into a works bike frame. This is a winner's motor! The ground shakes when the 491cc mill grabs hold of it. A short-shift approach is best, because it keeps the CR churning in the controllable part of the power.

What do you have to do to win on it? Be careful. Control yourself. Plan ahead. This is not a wing-it-and-go motor. It is a work-it, harness-it and keep-your-hands-away-from-its-mouth engine. With so much power at hand, the smart CR500 rider uses it sparingly. Only Magoo would hold it wide open. It is powerful enough to be included in a disarmament treaty.

### WHAT ABOUT THE HANDLING?

Remember the three shortcomings of the CR500—jetting, rear suspension and starting? Well, rear suspension is the biggest hang-up in getting the Honda to handle. The stock spring is too soft and the stock Showa shock is too wimpy. The soft rear spring lets the rear of the bike drop to a set posi-



*Striking good looks make the CR500R the best-looking Open bike on the track. The black wings scoop air into the cylinder.*

tion and wallow. This wreaks havoc on the turning precision and, when landing from jumps or accelerating hard, forces the front wheel to lift high into the air. The CR500 is wheelie prone.

A stiffer rear spring will help the handling, but the Showa shock fades rapidly and isn't plush enough to begin with.

### WHAT IS THE BEST WAY TO RIDE IT?

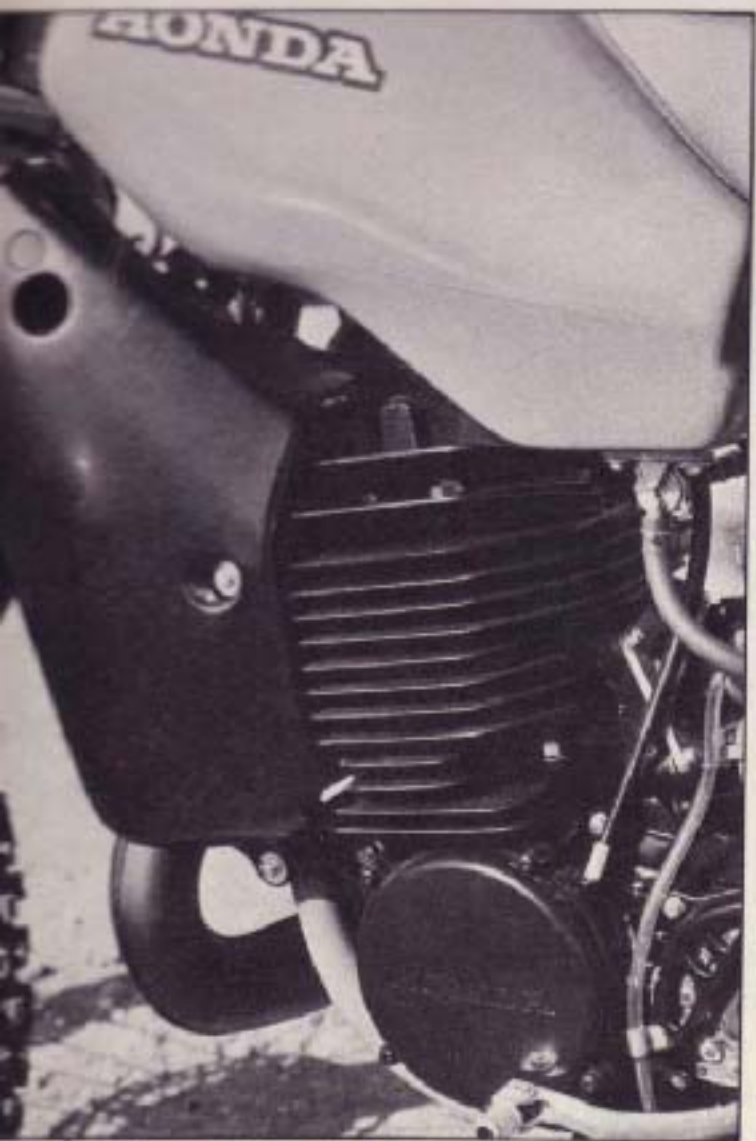
Too many riders are trying to play cut and thrust with the CR500. You could get away with that quick-

steering and hard-charging style on the CR480, but not on the 500. With the 500's power output, a rider must let the motor do the work instead of the rider. Less steering control is required, because the motor can blast the CR500 around the tightest turns. If you try to tuck the front end in and dart around a corner, the power will drive the front end out. It is best to make sure that the rear end is aimed in the direction you want to go. The front will follow or lead, but not necessarily in that order. The CR500 is



*Is this a better bike than the 1983 CR480? The brakes, power and handling are better. The suspension, jetting and starting are worse.*

# CR500R



*With an 89mm by 79mm bore and stroke, the 491cc engine (you didn't really think it was 500cc, did you?) churns out incredible mid-range power through an excellent five-speed box.*

quick handling, but the best approach to racing the big red machine is to mellow out.

## **WHAT DOES ALL THIS MEAN?**

Honda has built a bike that handles very well, with a motor that overpowers the bike's cut-and-thrust characteristics. So forget the handling characteristics and ride the motor. Use the rear wheel and the throttle to massage the track. Don't try to cut and thrust; instead, let the motor rip and tear. There is some headshake, but not an objectionable amount for motocross work.

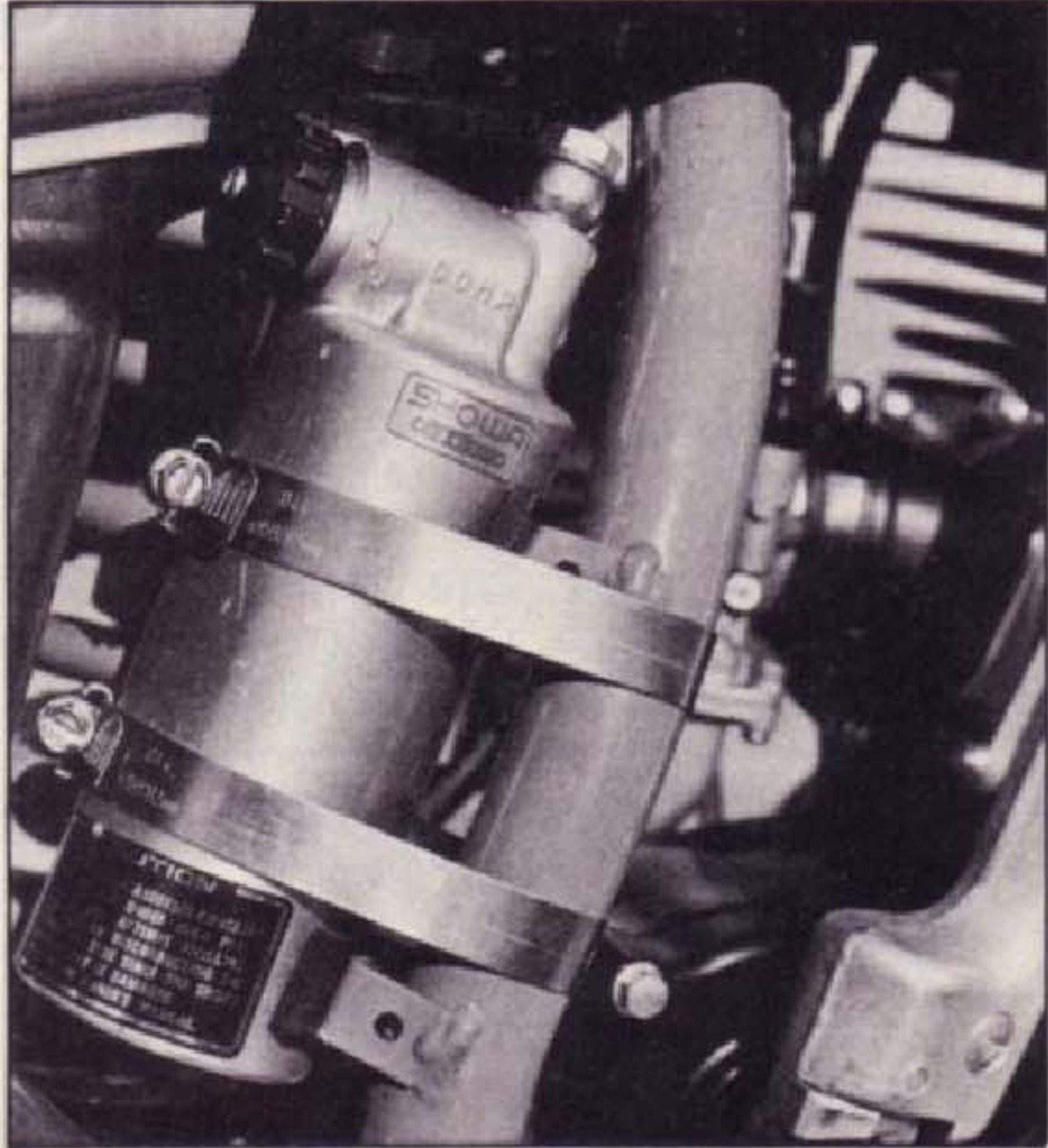
## **WHAT CAN A FELLOW DO?**

Fixing the jetting problem isn't easy, and many of the hot mods require tossing the stock Keihin in favor of a Mikuni. We tried to live with the stock Vergasser and had our best luck by making minute changes in the needle position. A radical move to clear up low-end richness almost always results in mid-range leanness. In stock trim the bottom is blubbery. Move the needle down two notches from the center, and change the pilot only as a last resort. When it works, leave it alone, but always have a friend listen for telltale sounds of detonation, then move the needle. Next month we'll have a full jetting fix for the CR500.

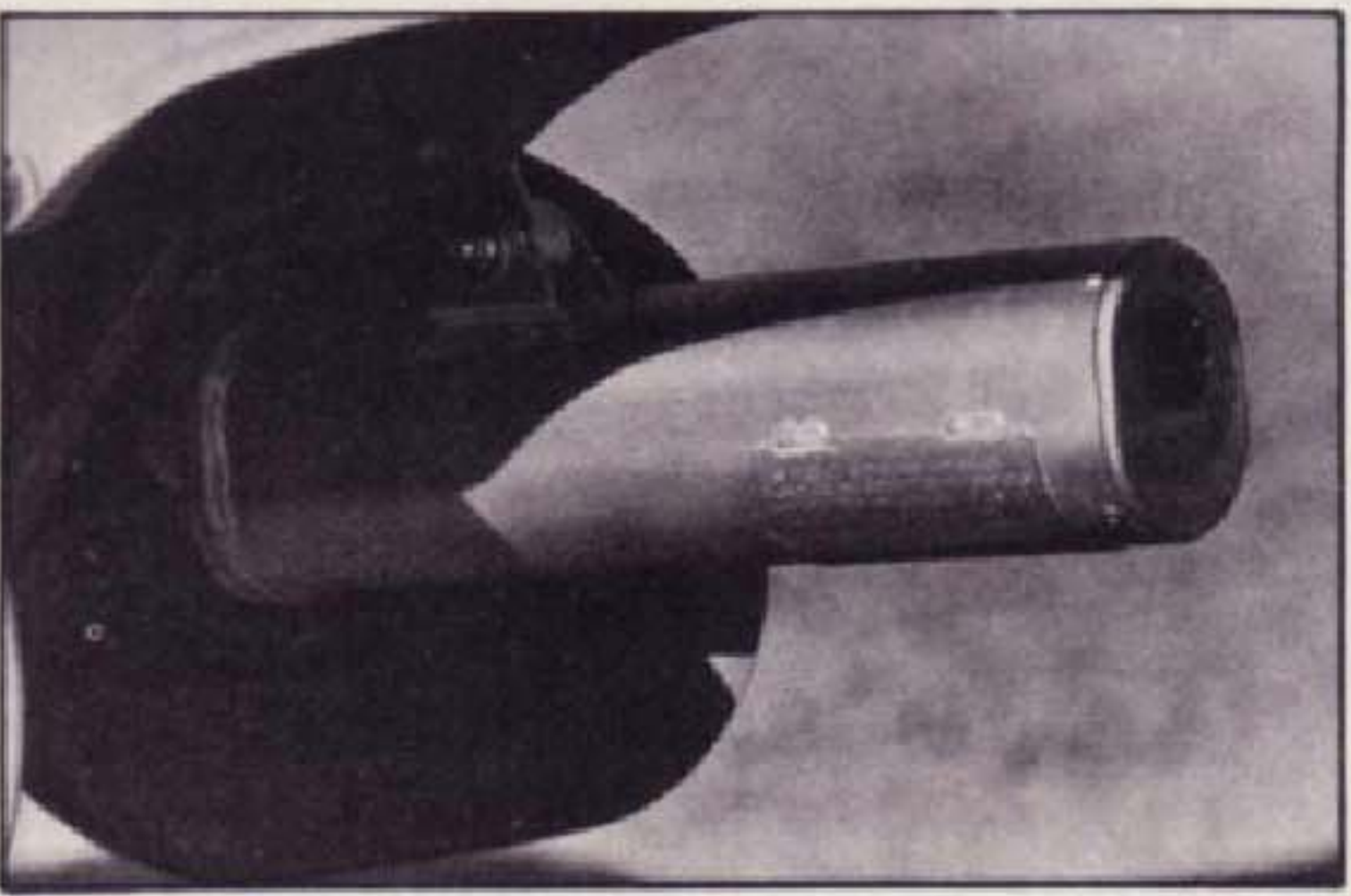


*With its short-shift pull, the CR500R can leap the widest chasms. There is not a lot of top end, but last year's strong low-end burst has been moved to the middle.*

# CR500R



*There are 22 rebound clicks on the Showa shock, plus 17 compression settings and a Simons-style link, and the forks have 14 adjustments of their own. You can wear out a screwdriver turning clickers.*



*For 1984, Honda increased the length of the silencer. Also noticeable is the fact that the pipe, chain and kickstarter are all on a different side of the bike this year.*

## **WHAT ABOUT THE CR500? IS IT A WINNER?**

Watch the jetting, put on a stiffer shock spring and park on a hill, and you will love the CR. Last year everybody moaned that they wanted more power, especially more on top, and Honda responded with quasar horsepower. It isn't too much power until the rider gets in over his head. It is a powerband with something for everyone, from mild to wild, but the activator is the rider's right wrist.

Honda's CR500 is a better bike than anyone knows, mainly because few people are talented enough to use what it has. Three shortcomings stop it from being World class, but a savvy rider will fix them and win. □