

# RACE TEST

# HONDA CR250R

Semi-made in America

□ There are striking similarities between the original CR250 from 1973 and the 1978 CR250R. Both bikes set the motocross world on fire, and were received with glowing praise and massive consumer interest. Both bikes had max power and minimum handling. Both bikes fell from favor very quickly when the quirks became common knowledge. Both bikes suffered from frame problems, one from poor geometry (1973) and the other from excessive flex (1978). Both bikes had shocks that did little more than keep the spring from falling off. Both bikes were beautifully crafted and devilish to control.

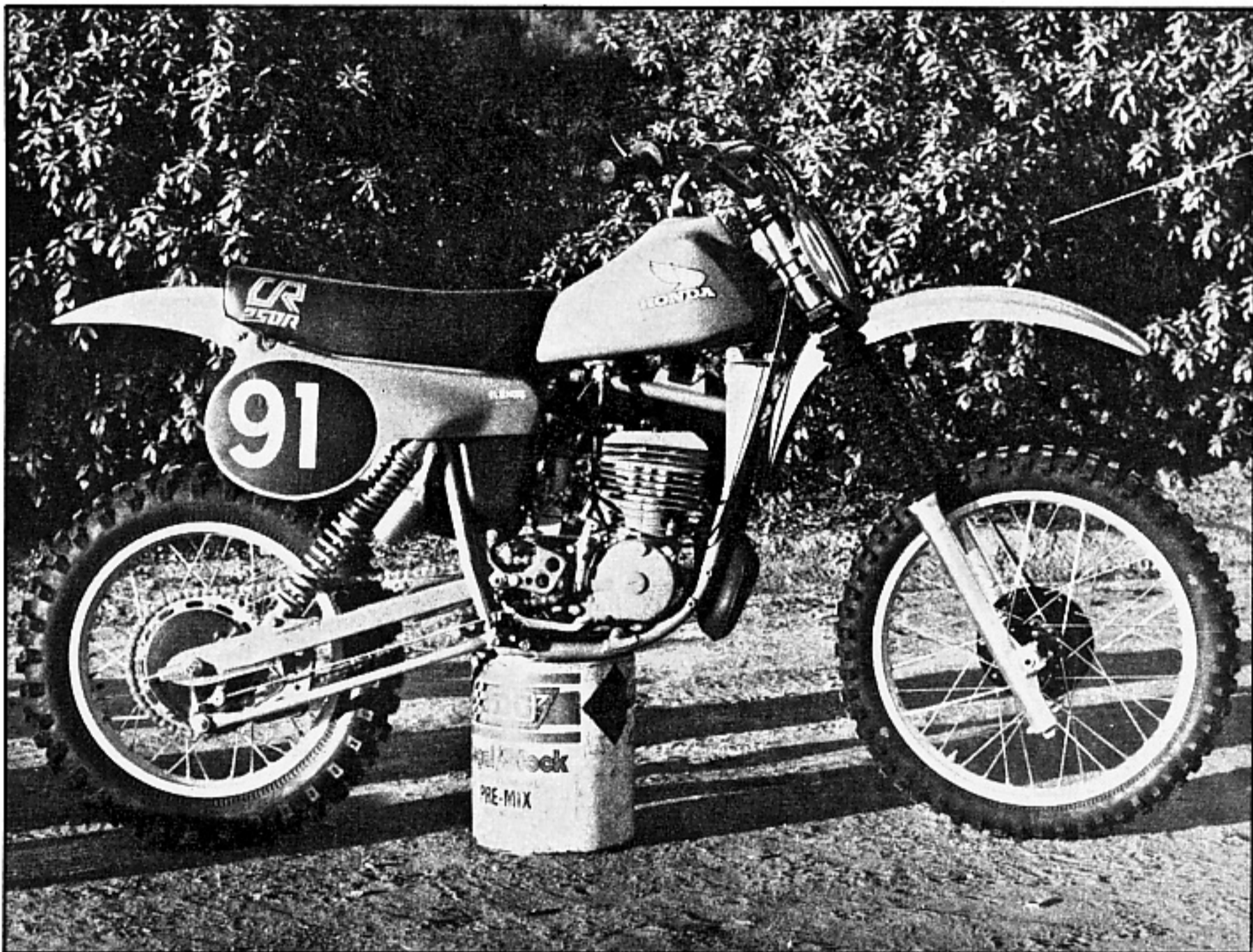
The difference between the 1973 Honda CR250 and the latest series of R-models is that it took six years for Honda to make a serious effort to rectify the flaws back in '73. The new 1980 CR250R is almost instant moto-maintenance in the world of mega-buck production-line realities, only a two-year wait!

## HONDA OF THE EIGHTIES

The new Honda CR250R is a totally new motocross bike; most pieces have been changed, and the left-over parts were only the proven units.

What's old? The wheels and hubs are the same. The color is unchanged. The tranny is identical in terms of gears, ratios and material, although the cases have been changed modestly. The air box and carb are the last holdovers from the previous models. Everything else is new, modified or eliminated.

The CR250R looks sano. The all-red



**The all-new Honda is vastly improved over last year's red rocket. The motor is mellow and the frame is stronger.**

rooster hasn't lost anything in its cosmetic transition. The gas tank is plastic this year, and new FIM side panels have been added to bring the looks up to date with the competition. The Honda CR250R is *semi-made in America*. The frame, seat, gas tank, fenders, handlebars, side panels and air box are manufactured in Ohio, while the motor, hubs and suspension are

shipped in from Japan. The whole package is assembled in Marysville, Ohio.

## THE CHICKEN OR THE EGG

There are two major changes to the CR250R: the frame and cylinder. Neither change could have been made without the other. The cylinder has a center-port exhaust for 1980, instead of the side-port



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design of 1978 and 1979. The frame is now a double-downtube design instead of the earlier models' single downtube structure. The center-port motor wouldn't fit in last year's frame because the pipe would hit the downtube, and last year's engine couldn't fit in this year's frame or the frame would hit the pipe. Shazamm!

The burning question is, which came first, the frame or the cylinder? The double-downtube frame was the goal that the Honda engineers were striving for, and the center-port cylinder was dragged into the 1980s with it.

The frame on the previous CRs flexed a great deal. The proof of this was in the ride. The 1978 model would do one corner perfectly during the first lap, and then, with everything seemingly the same, it would quiver and shake in the next lap. The best Honda riders in the past two years have been the aggressive riders. The aggressive riders were able to bend vectors with enough force to distort the frame into a semblance of consistency, while the smooth or steady rider never developed an assurance of feel.

The double-downtube frame is there to stiffen the whole unit. Essentially, the micro-moments of flex made the 1978 CR250R less than a great motorcycle. But the 1978 model had wimpy suspension to boot. The old shocks never really lived up to an adequate rating, and the forks had a flex problem of their own.

These were the major problems that faced the Asaka engineers, and the new frame and suspenders alleviate them.

## THE RED THING

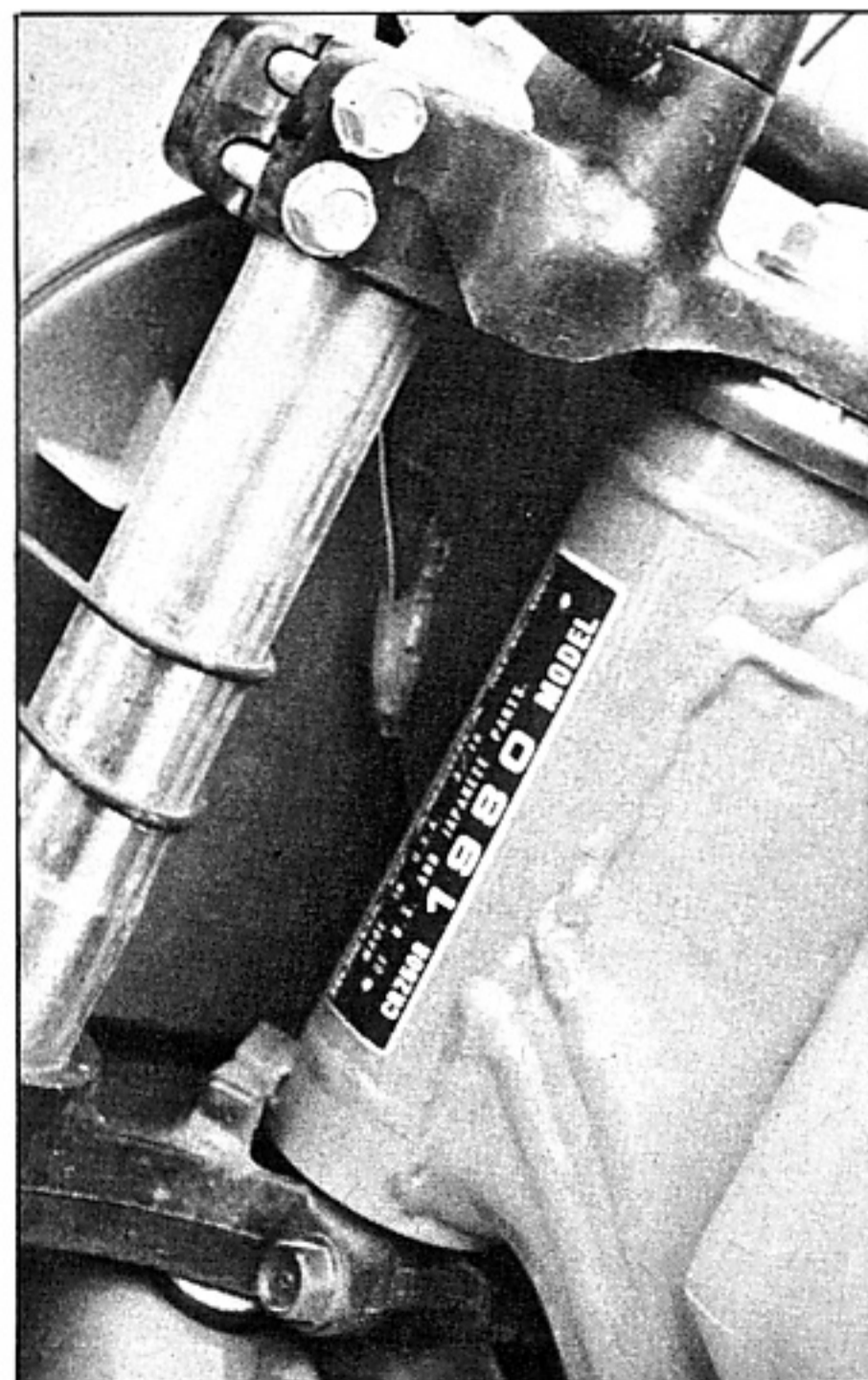
The red thing nestled in the frame is basically the same motor as last year, but it doesn't feel or perform like it did the previous year. The transmission is the same. The lower end has had reinforcing ridges added to the case base plate. The ridges strengthen the cases to prevent the cylinder from warping from improper torque on the cylinder studs. This additional meat should end the problem of blown base gaskets for 1980.

The cylinder is the same with the exception of the marginally larger center-port exhaust. The exhaust port is .7mm taller and 1mm wider. On the intake side, the bridge between the boost port and intake has been removed. The cylinder keeps its hard chrome liner, and 70mm by 64.4mm bore and stroke (247cc). The head has been increased in size for better cooling and the ignition was changed to alter the advance curve. The result is that the ignition gives better low-end response.

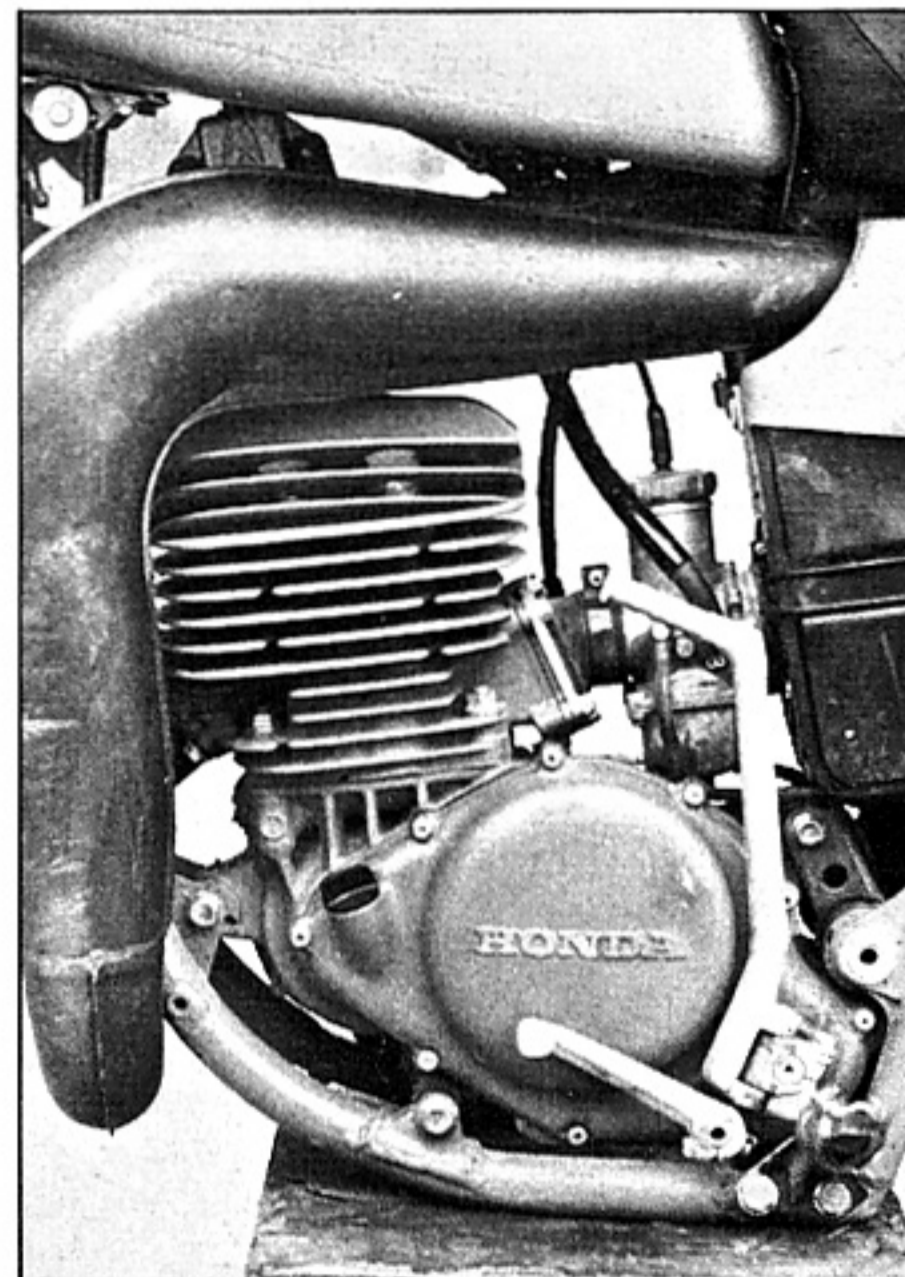
Each modification to the motor was designed to maintain the peak horsepower, which Honda felt was more than adequate, but bring about large increases in low and mid-range power.



The suspenders are the best Honda has ever offered, but aftermarket stuff is better. Bite the bullet.



The serial number plate says Made in the USA of U.S. and Japanese parts.



The power is lovely for Juniors and Intermediates. Pros will want more top end because the Honda doesn't rev out enough for full-on flights of GP fancy.



The center-port exhaust is designed to fit the new double-downtube frame, not the other way around.

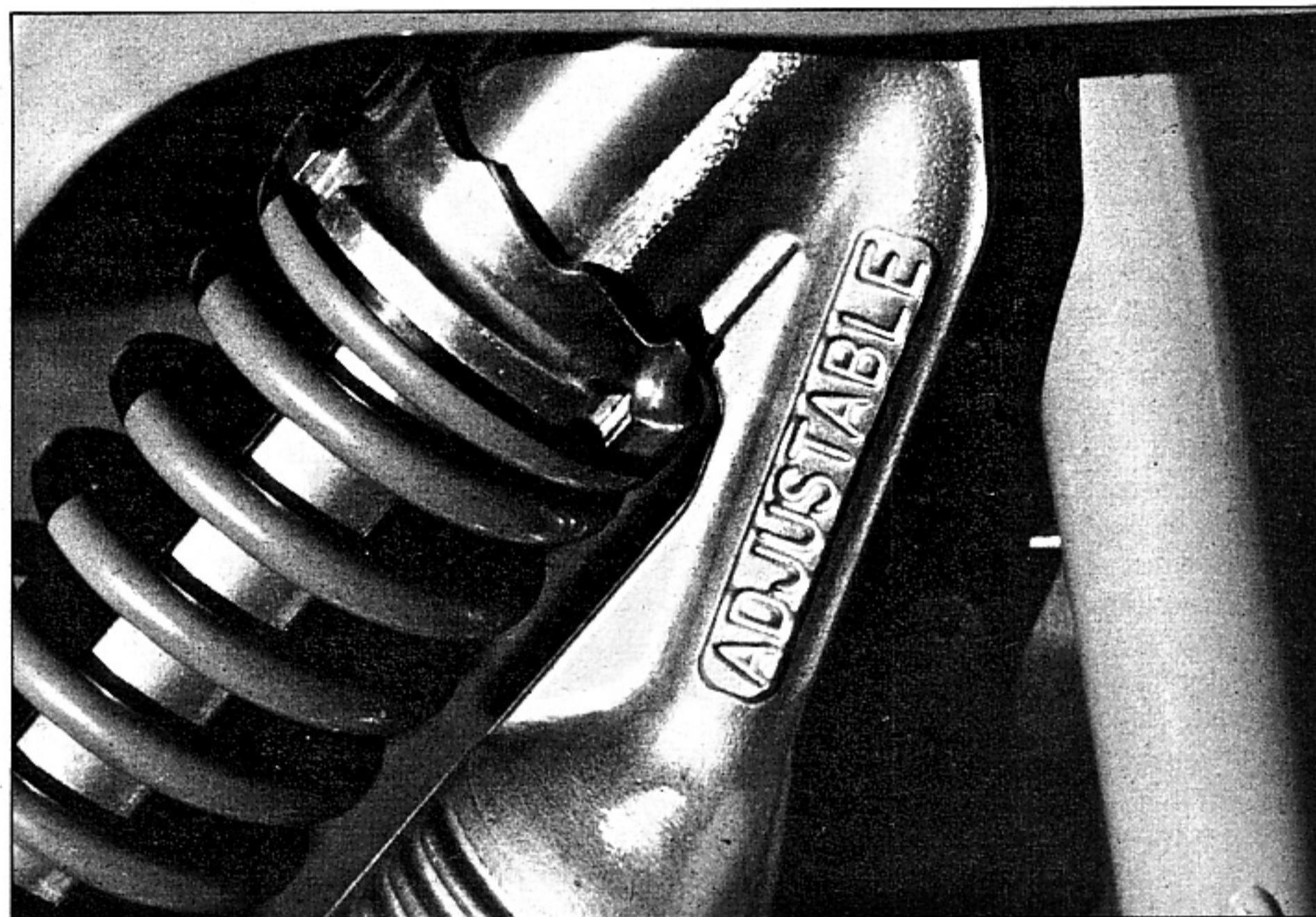
The reed valve has benefitted from thinner reed petals, which respond quicker to pressure pulses, and feed more fuel at low rpm. The pre-mix rushes in through the bridgeless intake port, does its job, and exits out of the new center-port exhaust, and into the new high-volume torque pipe. The result of these changes is exciting.

#### WINGS OVER SADDLEBACK

Climb on board! The seat height is a decent 37½ inches. It is tall, but that is the standard now. The Showa forks have the same travel as last year (11.8 inches), but air caps are now Honda issue. The real modification to the forks is a little Dacron-fiber bushing that nestles next to each tube and slider. The additional bushing provides more guidance and control on the tube, resulting in less stiction and bind through the bumps. The forks definitely feel better.

As you settle into the American-made seat, the shocks sag into submission. Oops! Jump off the bike and dial the pre-load up to the max. That feels better, but is too soft for fast riding on a rough track, which is exactly what you have in mind. Both the brake and shift lever are cast aluminum, and cost a ton to replace. The brake feels good, but the shift lever/foot-peg relationship is awkward. The shift shaft exits several inches below the foot-peg height. Scott boot-shod testers moved the lever up so high that it was almost at a 45-degree angle to the ground.

The bars feel OK, and there is nothing special about the levers or throttle. It would be nice to see a side-pull throttle, like a Gunnar Gasser, and some power-



The trick Showa reservoir shocks are adjustable. It says so on the side, but the Honda technicians told us they didn't want people adjusting them.

bend levers. The grips feel fine for some people and others hate them. We liked them. They even have a molded-in notch for wiring them to the bars.

The Honda feels beefy. It has a markedly big feel to it. It isn't wider, taller or fatter than normal, but it does feel hefty. It weighs two and a half pounds more than last year's bike. Most of that weight is in the frame.

Snick it into first! The first thing you are going to notice is an abrupt rush of power. The second thing you are going to notice is that you stayed in first gear too long.

The Honda CR250R doesn't rev. The peak ponies are identical to last year's bike, but the drop-off is almost instantaneous. Last year you could wring its little heart out until it burst. This year it dies before 8000 rpm. What is this? A short-shift Honda! For the first five laps you will find yourself in the wrong gear in every tight corner. It seems correct to go down a gear and rev it out, but it isn't. By the sixth lap you will have been passed by every mini on the track, and be getting pretty burned. It is then that you decide to shift into second, instead of first, in that hairpin. The Honda

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The gas tank is wider than last year. It is also plastic. The front number plate needs cable savers.

pulls like a tractor and the suction as you accelerate out of the turn rips the halters off of three pit tootsies by the scoring tower. If it worked for second, it will probably work for third. About a thousand R's before last year's shift point you slam it into third and pull up behind an Open bike. Why wait any longer? Grab fourth and go for it.

The Honda is a short-shifter dream. All of its power is on the bottom. It is more of an Open bike than a 250, but it is completely controllable.

## GETTING THROUGH THE ROUGH

The Honda likes the rider to move around on it. The weight bias this year has been shifted slightly forward from last year (about two percent), and the trail has been reduced by a quarter-inch. The Honda turns much better. It is more responsive to commands because the geometry is quicker, the frame is stiffer and the front end is slightly heavier. Little changes reap big rewards.

The new shocks are production versions of the hand-carved Showa works bike shocks. Don't be misled! None of the factory riders would use these shocks last year, but none of them had to plunk down over 300 smackers for replacements either. The stock shocks are better than

last year's, and by a far shot they are usable. The spring rate is set for about a 150-pound rider, the size of your average Japanese test rider, and the faster you go, the more spring you need. Your Honda dealer should be stocking stiffer accessory springs. The Showa shocks have a rubber bladder inside the aluminum-finned reservoir. The nitrogen (or air) pressure can be changed by popping off a little tin cover under the reservoir, and charging the shock. Cast into the reservoir is the word *adjustable*, but the Honda service technicians said they didn't really want anyone adjusting their shocks.

The forks respond to the same mods as last year's, and the addition of air caps makes last-minute tuning a lot easier. For the average Sunday racer, the stock CR250R is spot-on. The improvements have been massive.

## PICKY PICKY PICKY

The new plastic gas tank is good. The gas cap has been increased in size for the first time in Honda MX history, but it had to be, because it is difficult to mold small openings and threads in plastic. The rear of the tank is held on by a rubber strap, but there is even a safety wire, just in case.

The air box is the same as last year: a nightmare to get into. Honda's contention

is that the chrome bore must be sealed perfectly, and the elaborate bolt and clamp system guarantees that it will be hermetically sealed.

The chain is guided by a new set of urethane skateboard-type rollers. The rollers exploded or melted by the second race. This is the third type of roller in three years for the CR250R. The rollers are stationary and do an excellent job of keeping the 11.4 inches of travel in check.

The Claw-Action tires are gone. Hooray! The new Bridgestone 3.00x21 and 5.10x18 knobbies are almost identical to the tires found on Yamaha and Suzuki motocross bikes this year. The Claw tires were not the hot setup, and the new Stones, although not Metzlers or Pirellis, are an improvement.

The new side panels are pretty trick, and Honda even put dark-colored discs on the bikes this year. The front number plate isn't as sano. Honda was the leader in the development of the cable-saver number plate on their works bikes, but still haven't put it into production yet.

The swingarm rides on needle bearings and is one inch longer. The swingarm should be stiffer; most of the flex that is left in the frame can be traced to the poor swingarm. None of the works bikes or Mugen racers use the stock swingarm. The

## HONDA CR250R SPECIFICATIONS

MAKE ..... Honda  
MODEL ..... CR250R  
COUNTRY OF MANUFACTURE ..... Japan/  
U.S.A.  
RETAIL PRICE ..... \$1800 +

### ENGINE:

TYPE ..... Single, reed-valved, two-stroke  
BORE AND STROKE ..... 70mm x 64.4mm  
DISPLACEMENT ..... 247cc  
COMPRESSION RATIO ..... 7.3:1  
IGNITION ..... CDI  
CARBURETOR ..... 36mm Keihin  
LUBRICATION ..... Pre-mix, 20:1  
AIR CLEANER ..... Oiled foam

### DIMENSIONS:

FRONT FORKS ..... Showa 37mm, air/oil,  
11.8 inches  
REAR SHOCKS ..... Showa reservoir, gas-  
charged, 11.4 inches  
WHEELBASE ..... 56.7 inches  
SEAT HEIGHT ..... 37.4 inches  
GROUND CLEARANCE ..... 13.2 inches  
DRY WEIGHT (claimed) ..... 218.3 pounds

travel on the rear was increased by almost half an inch this year thanks to the new shocks. The shocks have two damping settings. The shock shaft turns until it clicks. It clicks once for light damping and twice for heavy damping. We like the heavy damping.

Honda supplies a quick-detach side-stand with every bike. It is a loop of steel rod that hooks into the footpeg lugs to hold the bike up, but it only works on level ground on a windless day. You don't need a sidestand on a race bike, since it should be up on the milk crate getting loving care between modes.

### IS IT THE BEST?

It is the best Honda 250 ever, and certainly a competitive 250 motocrosser. The motor has so much low-end and mid-range punch that the red rocket could double as a trailbike. The new frame results in a better-working handling package, and the improved suspenders mean that you don't have to buy new stuff right away. Face it, the accessory shocks and forks are better, and will make the Honda work that much smoother, but you pay your money! The Honda is leaps and bounds better than any Japanese 250 on the market in 1979, and it sets the stage for the motocross of the '80s. □