





## MXA RACE TEST



# IS THE 1992 HONDA CR250 REALLY BETTER?

A Honda like no other

□ Honda got tired of being taken for granted. They wanted to be liked for more than their predictable handling, quasar horsepower, awesome reliability and perfect detailing. Like that plain, skinny and gangly girl in high school who becomes a movie star, Honda wanted to blossom into a red-headed bombshell.

So for '92 they threw the corporate red plastic in the trash bin—too staid. Color chips were collected and, after an exhaustive search (they probably consulted with Peter Max and Charo), they selected "neon red"—it had pizzazz. Something had to be done about the motor, said the marketing boys. It's too easy to ride, too broad, too steady and too powerful—it was almost an unfair advantage. The engineers were told

to warm up their dynos and not to leave those smoked-filled rooms until they came out with a hard-hitting, fire-breathing, rubber-shredding, wheel-standing motor that could engender some "rad" ad copy. Oh, by the way, Honda got the chassis designers on the intercom and ordered a new frame. What traits did they demand of the geometry boys? That's easy! New traits. The quickest of the quick—nothing else would do. Showa was brought back in for a serious talk about suspension. The fate of the new-generation CR250 depended on getting suspension components that not only went down but came back up. Showa said they could do it— and thus was born the '92 Honda CR250.

A bike like no other Honda in history.

*On the spec sheet: As a package, the '92 Honda CR250 chassis is shorter, lighter and steeper. The new motor is narrower, as is the body work. All in all, the '92 CR250 shares very few traits in common with its predecessors.*

### MOST COMMON QUESTIONS

#### ANALYZING THE '92 CR250

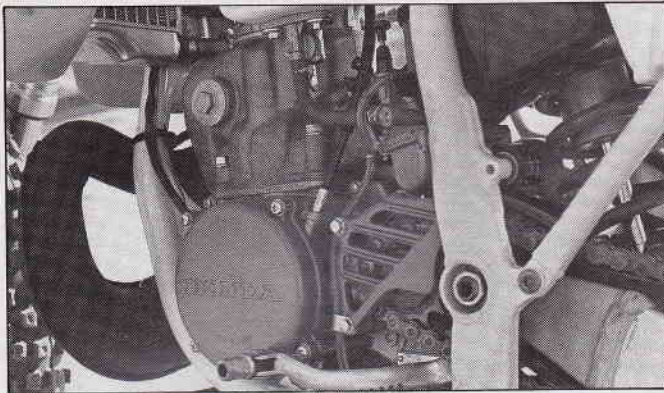
- New bikes gather crowds in the pits. New Hondas could sell tickets. They don't only look, they ask questions. These are the things that inquiring minds want to know about the '92 Honda CR250.

#### QUESTION ONE: DOES THE SUSPENSION WORK?

With almost any other bike on the planet the first question asked would be, "How fast is it?" Not so with the '92 Honda CR250. Because of the jackhammer feel of last year's fork and shock, most Honda racers are holding their breath (and their check-books) until they know if the suspension goes up and down in '92.

In '91 the Honda forks and shock had midrange harshness that bordered on sado-masochism. Riders complained that the forks would move about halfway through the stroke and stop. The pounding to forearms and spinal columns meant that '91 CR250 riders preferred short races on





**Technological borrower:** The best way to describe Honda's new CR250 power valve system is to say that it has a flapper exhaust valve like a KTM, KIPs valves like a Kawasaki and an ATAC chamber from an '87 Honda. The end result is less moving parts and a brutal bark just below the midrange.



# CR250

smooth tracks. It was no secret that the Showa front forks and Kayaba rear shock were the lowest-rated suspension combo of all the Japanese-built motocross bikes.

More than enough riders to fill a stadium have announced that they will not be buying a '92 Honda if the forks and shock aren't fixed for '92. That kind of buyer revolt has Honda scared.

So, does the suspension work better? No more suspense—the fact is that the forks are vastly improved, but we don't think that the showroom setup is going to endear them to most riders. The new Showa 43mm upside-down forks (down from 45mm in '91) offer adjustable compression and rebound (a first for Honda). On our first series of rides and races we switched back and forth between our grimly suspended '91 model and the new '92. In a head-to-head comparison, the first thing you notice is that the midstroke harshness is significantly lessened. It is also moved later into the stroke. The effect is a more fluid stroke, not the best stroke in motocross suspension but a serious improvement over '91. That's not the whole story. The '92 midstroke harshness, which is manageable, is accompanied by an unwillingness to bottom. With our personal Showa technician in tow, we began dialing in the wide range of adjustments on the new Showa forks. The stock spring is a .385-kilo, oil height is 105mm and the clickers were set at four out on compression and 11 out on rebound. The goals were to eliminate as much midstroke harshness as possible, get full stroke out of the forks (as close to bottoming as possible over big jumps) and find ballpark clicker settings.

## QUESTION TWO: HOW DID WE FIX THE FORKS?

Right off the bat it should be noted that we didn't fix the forks. We tried to use available suspension knowledge to make them work up to their potential. We spent no money. We didn't pack the forks off to a dis-

tant suspension shop. We believe that we got a major improvement in the Showa forks by working with the stock parts. To set the scene: The new forks are better than the old forks, but every test rider complained about the fact that the forks still spiked in midstroke and resisted bottoming (even over big launchers). With this knowledge, we began by lowering the oil height. The stock oil height is 105mm (from the top of the tube to the top of the oil on a fully compressed fork leg); we moved in 5mm increments through the oil height scale. Starting at 105mm, we lowered the oil after four tries to 125mm from the top. At 125mm we got the best compression stroke (although fast or large riders could bottom the fork). For these riders we went back to 120mm oil height; to compensate for the lower oil height, which makes the forks flow much more linearly, we lightened the rebound clicker up (turned it out) two clicks. Additionally, we discovered that the compression clicker was very sensitive to one or two click adjustments and were able to dial in whatever compression damping we wanted. We switched to the stiffer .40-kilo spring to add more support for the first four inches of stroke and to help them handle supercross-style jumps without having to raise the oil level back to its stock height.

To recap: We recommend lowering the stock oil height to eliminate midstroke harshness and improve overall feel. Lower the oil in 5mm increments (stock is 105mm). We ended up at 120mm with the rebound set on 13 out and the compression on one out (stock is four out). The time you put into setting the oil height for your weight and track will pay off in plusher forks. Faster or heavier riders will want to use the optional .40-kilo spring, but it is not required for most riders.

Do we think that the forks are better than last year's? Yes. Do we think they are the best forks available? No.

## QUESTION THREE: WHAT ABOUT THE SHOCK?

Showa regained the contract to produce the shock for the Honda CR250 (Kayaba

**X-acto knife:** Off the showroom the '92 Hondas have red number plate backgrounds . . . well, not really red, more like orange. Did we say orange? They could be pink. Make that fluorescent red. No matter what the color, you have to get background material and cut out your own number plates.

still makes the CR125 and CR500 shocks). We're not quite sure why Honda returned to Showa, but we hazard a guess that, after Suzuki bought virtually the same Showa components that Honda rejected in '91 (and Suzuki got better reviews on their suspension than Honda did), Showa was able to point the blame at Honda's frame geometry or testing. Regardless, Showa is back on the back of the CR250.

Is it a better shock than last year? Yes. Is it the best rear suspension available? No.

Test riders thought that the forks were more improved than the shock was. The spring rate is a 5.0-kilo unit, and overall the shock feels adequate. It's a little skatey in the chatter bumps, and seems to want to stay up. Honda moved the swingarm pivot up to keep the '92 model from squatting under acceleration, but test riders noticed that the rear tended to jack up under all riding conditions. The rear shock obviously has a considerable amount of compression damping, because we ran the clickers 20 out on compression. It doesn't take a rocket scientist to realize that a properly valved shock would come stock with the clicker pre-set (thanks to prototype testing) near the middle of the clicker range (approximately ten clicks out), not at one end. With the compression set at 20 out, you have a wide selection of harder compression settings (which you won't need) and very few softer ones. The Honda shock only has 24 clicks on compression.

For the best performance, run 100mm of rear sag, the compression clicker set on 20 out and the rebound on six out. For fast tracks with sharp, square-edged bumps, we back the rebound out two additional clicks.

## QUESTION FIVE: HOW FAST IS IT?

In '91 the CR250 powerband was the longest, broadest and most powerful on the track. Last year's power built from a smooth bottom-end all the way to a runaway locomotive top-end. It was without a doubt the



best motor in motocross—by leaps and bounds. What about '92?

As smooth, linear, long and torquey as the '91 model was, the new '92 CR250 powerplant is quick, hard-hitting, fast-revving and abrupt. It barks on just above the low-end and snarls through the mid-range like a rabid dog. It has nothing in common with the last five years worth of Honda motors. Where traditional CR powerplants built a crescendo of power based on a no-burst, no-surge, no-glitches powerband, the new breed of Honda is closer to a Suzuki RM250 powerband—only beefed up so that the seams are bulging with power.

Is it faster than last year's CR250 (which was faster than anything on the planet)? Yes! Emphatically yes! The explosive nature of the '92 motor produces its power right now. No delays! You wick the throttle on and within a nano-second the CR is going full blast. Does it make the '90 and '91 style of power obsolete? No! Emphatically no! The smoothness, incredible wind-up and tractable nature of the '91 motor is the perfect counterpoint to the hyper '92 motor. Lap times prove that both styles of power work, but it would be fair to say that the new '92 motor is more supercross-like, and thus better at tight twisty tracks. It has light switch power that can turn short straights, tricky jump combinations and flick-it esses into child's play.

Do we have any complaints about the '92 CR250 motor? No. The clutch is light. The power is instantaneous. The gear ratios are well placed. This motor bears virtually no resemblance (short of major horses) to last year's powerband.

#### **QUESTION SIX: HOW DOES IT HANDLE?**

Hold onto your hat! The '92 Honda CR250 is light, short, quick, agile and upright. The frame has been totally redesigned, and if you think the new chassis was redesigned with the intent of increasing stability—forget it. Snappy cornering is what the '92 CR250 does best. The head angle of the '92 model is two degrees steeper than it was last year—two degrees! That is an incredible geometry change, and the new 26-degree head angle is aided and abetted by a shorter wheelbase, less trail and more fork offset.

How does it handle? Have you ever ridden a Suzuki RM125? It feels that quick and agile. Surprisingly, even with the super-steep head angle and barky powerband, the front wheel of the CR250 sticks on hard slick corners. It tracks through ruts with nary a wiggle and is so much more responsive to handlebar input that it makes the '91 model feel like an 18-wheel semi-truck.

How different is the '92 model from the '91? Night and day. The '91 Honda was a

**Joy ride: Every test rider expected Honda to produce a bike that turned quicker, weighed less, hit harder and was more stable at speed. Well, three out of four isn't all that bad. It's hard to get more bark, more bite and less weight without adding some twitchiness. ►**





# CR250

long-feeling bike that had a tendency to hunker down under acceleration and build up speed like a train rolling down a steep grade. It didn't feel light, but it was a substantial machine that stuck to the ground through the turns and was very accurate. Other brands could turn underneath it, but few could hit the same spot with the consistency of the '91 CR250. Forget all that! The '92 is ultra-light-feeling. The bike itself is only one pound lighter but feels 20. The narrow chassis and motor has a feathery whip-it, click-it and flick-it feel. The lighter feel and quicker steering make the '92 CR250 into more of a charger bike. The agile chassis is perfectly blended to the abrupt powerband. This is the new standard by which cut-and-thrust motorcycles will be judged. Is that good? Last year, Honda had the most conservative chassis, Suzuki the most radical, Kawasaki the second quickest and Yamaha the best overall package. This year, Honda has moved into Suzuki territory—on the radical fringe.

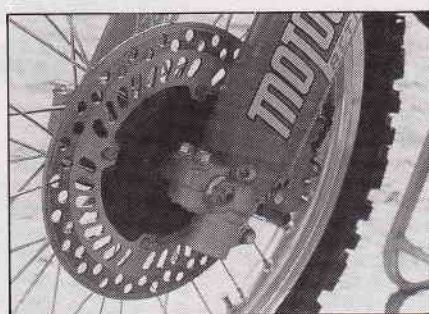
## QUESTION SEVEN: WHAT ABOUT THE HEADSHAKE?

Nothing that was done to the new chassis should reduce headshake—and Hondas have always had world-class headshake. A steeper head angle (a head angle that could have been found on a trials bike five years ago) and less trail are not the typical ways that a frame builder gets increased high-speed stability—but it also doesn't tell the complete story. This is not the '91 chassis with a two-degree-steeper head angle; it is all new from the ground up, and that includes a shorter wheelbase, narrower frame, smaller motor (two pounds lighter) and stiffer chassis. New combinations of traits, from weight bias to motor placement, can affect frame stability.

Do we think that the '92 Honda CR250 is more stable than the '91 model? No. It definitely has a twitchier frame. The front wheel hunts and pecks through stutter bumps, and test riders sawed the bars at speed. This is the lot in life of radically quick-handling bikes. The price you pay to cut-and-thrust is to hang on for dear life when the going gets rough. On the upbeat side, the death rattle headshake of the past has been lessened. On the other hand, the whole chassis has taken on a jittery feel that it didn't have before (and yes, Virginia, it still has headshake).

## QUESTION EIGHT: WHAT'S GOOD & WHAT'S BAD?

The translucent red plastic grows on you, but looks cheap. The new side panels don't appear to be quite as stout or durable as last year's. Number plate area on the side panels is smaller than last year (we hate it when numbers barely fit). Off the showroom the '92 Honda CR250 comes with red number plates. It's bogus for a racing motorcycle not to come with a white number plate background (the AMA-required col-



**Swiss cheese:** Last year the Honda brake rotor had slots; this year it has holes. Engineers don't think it makes much of a difference, but what does make a big boost in front stopping is the reinforced brake caliper. Serious pucker power.

or). Of course, in Europe green is the required color, and in Japan red is the official color. Does that tell you something?

Every test rider complained that, when he was sitting on the bike, the heat from the shock reservoir could be felt on the inside of his thigh. The new bodywork is so narrow that the piggyback reservoir sticks out.

The right side of the white airbox immediately gets smeared with aluminum grit from the shock reservoir and the rider's boot. The left side stays white, but the right side turns black.

Stock tires are a Dunlop K490 on the front and K695 on the rear. This is a good all-around combination for a showroom bike.

The bike has a super front brake. Honda has always had the best brakes, but if you ride a '92 Honda be very careful the first time you use the '92 front stopper. It is identical in power to the works units that Stanton and Bayle use.

Tank decals will last longer this year than last year, but we are talking hours, not months, worth of difference.

**Carving knife:** If you own a Honda CR250 and think it turns sharp—you are wrong! The '92 CR turns so quickly that it can literally cut underneath, around and over a '91 CR250. It's a fun bike to ride, and one that test riders described as a fast Suzuki RM250.

Shifting and clutch action are first-rate. Change your gearbox oil as often as you can afford. Your clutch will last twice as long.

Stock gearing is now 13-49. Last year the gearing was 14-51. It's geared lower. While on the subject of different but the same, Honda put lower bars on the CR250, but since the triple clamp is higher the result is basically the same. Every test rider felt that the seat/bar arrangement made the rider feel like his arms were reaching up more to grab the bars.

Great news? Honda still has an 18-inch rear wheel. Everyone predicted that Honda would switch to the 19-incher and thus end the last major 18-inch holdout. While the other factories claim that the 19-inch tires are better, the MXA test riders all prefer 18-inch rear tires. We applaud Honda for sticking with what we like.

## QUESTION NINE: WHAT DO WE REALLY THINK?

If you took all of the MXA test riders out to a local race and lined up the five major '91 250 motocross bikes (Honda, Yamaha, Kawasaki, Suzuki and KTM) and asked each rider to pick a bike, when you got to the fifth guy he'd be stuck with the Honda. Test riders loved the motor but hated the suspension. That isn't going to happen in '92. The new motor, chassis and feel are directly in line with what most riders want—and the suspension, while not the greatest components in the world, won't be hindering the rest of the '92 Honda CR250 from doing its job. □