

HONDA CR250R

Are you looking for an edge in the competitive 250cc class? Try Honda's new CR250R—it's a sure-fire shortcut to the winner's circle.

□ The Good News is this: Honda's 1983 motocrossers share a strong family resemblance. We raved about the CR125 we tested in February, and the 480 we evaluated a month later was equally impressive. So when the CR250R arrived at our doorstep we naturally had great expectations. We haven't been disappointed. After putting the 250 through its paces, we're happy to report the quarter-liter CR is every bit as praiseworthy as its two siblings.

Like the 125 and 480, the Honda 250 is light relative to the other bikes in its class; at 222.5 pounds with one gallon of gas, the '83 CR is 12.5 pounds lighter than last year's version and five pounds lighter than the new Yamaha YZ250. Honda engineers pared weight in a number of places. They used a more compact bolt-up arrangement for the head and cylinder and made the shift lever, brake lever, kickstarter, rear brake stay arm, Pro-Link swing-arm pieces and silencer of lightweight aluminum. Cutting weight pays off in terms of improved handling. The CR feels nimble and responsive under all conditions, whether you're gliding through the air or blasting through a berm.

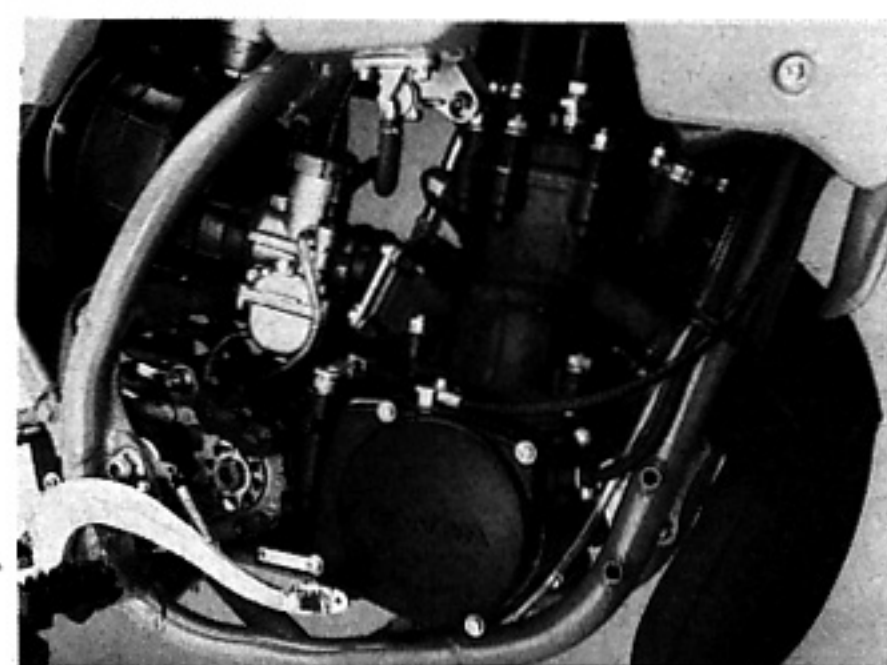
Part of the CR's agility results from its new steering geometry, cut to 26.8 degrees of rake and 4.1 inches of trail from last year's 27.5 degrees and 4.3 inches. This year's bike is also 10mm shorter in wheelbase than the 1982 model, and all these changes add up to a 250 unsurpassed in steering quickness and precision. The Honda sticks well in all kinds of corners, and this surefootedness breeds rider confidence; even in dry, slick corners the front end never gives a hint of push or washout. The excellent Bridgestone



front tire also deserves credit; all the '83 Honda motocrossers use this tire and each bike has shown remarkable front tire performance.

Bikes with such quick steering geometry often give up a measure of high-speed stability, but the CR suffers from no such trade-off. The 250 remains reassuringly stable through sand as well as over hard-packed turf, be it smooth, rough or patterned with deep whoops.

Resemblances between the 250



and 480 appear in the suspension system; the two bikes share identical front and rear components. The 250's 43mm fork uses the same spring as the 480's and offers 14-way adjustable compression damping like the open-class bike, but American Honda recommends five-weight instead of 10-weight oil for the smaller bike's fork. Our CR's fork had been set up according to the specifications of Honda test rider Phil Larson. Oil level was 172mm from the top of the tubes (with the springs removed and the fork collapsed), the damper set nine clicks out from the fully seated position, and zero psi in the front end. In this fashion, the CR fork is superb; the front end reacts well to small stutter bumps as well as large holes and bumps, and even though the fork might bottom landing off substantial jumps, the front end soaks up almost all the jolt.

In accordance with Honda's recommendations, we dialed up the lightest rebound and compression damping settings on the Showa shock, then set the spring preload according to rider weight—94mm (3.7 inches) of sag with the fully dressed rider seated. This setting is crucial; changing the attitude of the bike greatly af-

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fects steering characteristics as well as rear suspension action. Properly adjusted, the Pro-Link rear suspension provides plush rear-end action over small bumps, yet stiffens progressively through the arc of wheel travel, thereby providing good damping action over large obstacles. As the shock oil ages and damping rates deteriorate, the CR offers plenty of easy adjustability: 20 positions for rebound damping and 12 for compression damping. You can also change the shock oil to refresh your damper.

Honda made a few tuning changes to what is essentially last year's powerplant. The engineers altered the ignition curve and the port timing, and modified the exhaust and reed valves to boost low-end and top-end power at the expense of a little mid-range muscle. The result? An excellent powerband; the CR's punch builds quickly yet progressively, with no disconcerting jumps or flat spots to confound less-than-expert riders. Still, the 250R offers a strong top-end charge, and the engine revs so smoothly and willingly it's a pleasure to run hard. With such a flexible yet strong nature, this powerplant will satisfy riders ranging from beginner to expert.

Part of the secret to going fast is having the ability to stop quickly, and the Honda is superior here. The double-leading-shoe front brake combines strong stopping power with excellent feel and progressive action. Some double-leading-shoe brakes are grabby and difficult to modulate near the lockup point, but we had no

such problems with the CR. The single-leading-shoe full-floating rear brake proved equally effective.

Other changes include a stronger gearbox and clutch, and a new dual-flow liquid-cooling system to improve heat dissipation. The radiators are 50mm lower and a new gas tank locates more of the CR's fuel below the frame backbone; both changes lower the 250's center of gravity and improve handling. Like the 125's and 480's, the 250's works-type bolt-on rear frame section provides quick access to the rear shock and airbox for easy servicing, just as important to beginning racers as to factory-level aces.

The CR250's excellent on-track performance is more than enough reason to opt for a Honda this year. But there's another reason too—factory support. Honda's Race Support Newsletter is a valuable source of factory-tested race-tuning and maintenance tips.

There's some recent news. We received a Product Update sheet along with our 250 test bike. Honda sent this Update to all its dealers and CR250R owners informing them of a free piston-replacement program—this year's run of 250 motocrossers has been plagued by a batch of bad pistons, some of which broke skirts under extreme operating conditions. Honda is resolving the problem in a straightforward manner; '83 CR250 owners can either exchange the stock piston, rings, gaskets and wrist-pin clips for free replacement

items or have the work done free of charge by their local Honda dealer.

That's a commendable commitment to high quality. Combine that kind of dedication with the engineering expertise shown in Honda's new line of motocrossers, and it's no wonder this year's winners' circles are colored red. All by way of saying you can't do better than the CR250 for lightweight motocross. ■

Vital Statistics

Make & model Honda CR250R
Price \$2218

Engine

Type Two-stroke, reed-valve-inducted
single-cylinder; liquid-cooled
Bore & stroke 66.0 x 72.0mm (2.60 x 2.83 in.)
Displacement 246cc (15.0 cu. in.)
Transmission Five-speed, constant-mesh,
wet-clutch

Chassis

Type Single-downtube, full-cradle frame;
box-section aluminum swing arm
Suspension, front ... Leading-axle, air-adjustable
fork with 43mm tubes, 14-way
adjustable compression damping
and 12.0 in. (305mm) of travel
rear (1) gas-charged, remote-
reservoir shock absorber,
adjustable for spring preload and
rebound and compression
damping, producing 12.2 in.
(310mm) of rear-wheel travel
Brake, front Cable-actuated, double-leading-
shoe drum
rear Cable-actuated, single-leading-
shoe drum
Tire, front 90/80-21 Bridgestone
Motocross M33
rear 140/80-18 Bridgestone
Motocross M32
Fuel capacity 2.0 gal. (7.5 l)
Weight (w/one gal. gas) 222.5 lbs. (100.9 kg)