

2005 CR250R PRESS INFORMATION

The new CR250R renews its podium attack with a totally new engine and refined chassis components that will assure its place in the winners' circles of the world for yet another dominating season.

Colours

- Extreme Red (with White number plate and sidecovers)

Features and Benefits

New Features

- New cylinder design features RC exhaust valve housed in removable case for improved sealing.
- New stainless steel cylinder base gasket and revised port timing for improved bottom-end and midrange power.
- New cylinder head combustion chamber shape for improved bottom and midrange power.
- New one-piece exhaust valve for improved sealing.
- New dome piston for improved intake charge flow.
- New piston features single keystone piston ring for reduced friction and improved sealing.
- New crankshaft design for improved driveability.
- New crankcase with redesigned intake and scavenging ports for smoother air flow.
- New six-petal reed valves with narrower profile for stronger bottom-end power.
- New reed valve mounting angle to improve charge flow and top-end power.
- New carburettor settings to match power characteristics of engine.
- New shift fork shaft, shift forks and shift drum for improved shifting performance.
- New ECU mapping and RC valve control settings to match new engine power characteristics.
- New exhaust pipe shape has increased volume for improved low- to midrange power.
- Thicker radiator core (from 24 to 28mm) improves cooling capacity to handle extra power.
- New front axle placement for improved fork action and turning.
- New swingarm features a dual-axis, double-taper design with a large cast aluminium cross member that is lighter weight and stronger.
- New rear hub is stronger and lighter.
- New front and rear shock valving for improved bump absorption.
- New Honda Racing-inspired graphics.

Engine/Drivetrain

- Liquid-cooled two-stroke single-cylinder engine with 66.4 x 72mm bore and stroke and 9.0 : 1 compression ratio.
- Air intake boot shaped for more direct airflow, contributing to stronger low-speed engine performance.
- Foam gasket between airbox and air boot for better sealing and airflow management. Lightweight 38mm flat-slide Mikuni TMX carburettor provides both initial throttle crispness and instant throttle response to complement the engine's power character. Carburettor now has throttle position sensor (TPS) to calibrate timing with exhaust valve for improved power delivery.
- Crankcase reed induction with carbon fibre six -petal reed valve contributes to excellent off-idle throttle response, and top-end and over-rev power delivery.
- RC-style exhaust valve features a new rotary flap design with electronic control. The electronic control module uses engine rpm and throttle (TPS) opening to calculate exhaust valve position and signal a DC servo motor to adjust the RC valve, providing both a smooth transition from low- to midrange rpm and a broader torque curve.
- Exhaust header and expansion chamber are designed to maximise top-end power delivery.
- A 16-bit CPU incorporates both the DC Capacitor Discharge ignition and exhaust valve servo control, producing instantaneous data calculation and extremely accurate ignition and exhaust valve timing for maximum performance.
- Dual radiators permit forward engine placement while providing significant cooling capacity.
- Steel water-pump gear for excellent reliability.
- Eight-plate clutch provides significant surface area to handle the engine's torque while carefully matched clutch springs provide a light feel at the lever.
- Clutch damper design improves rear suspension feel and action while accelerating over bumps.
- Lightweight magnesium clutch cover.

- Durable 5-speed close-ratio transmission offers consistent performance in demanding racetrack conditions.
- Primary kickstarting system allows starting in any gear.

Chassis/Suspension

- Third-generation twin-spar aluminium frame delivers superior rider comfort and manoeuvrability.
- Semi-double-cradle design features a single large-diameter, tapered down-tube. Two rugged box-section rails attach to the base of the down-tube and support the engine. A forged aluminium steering head provides a compact and extremely durable mount for the frame spars and engine down-tube.
- Revised suspension settings deliver more controlled suspension action along with a plusher ride.
- Lightweight, 47mm inverted Showa twin-chamber cartridge-type fork with aluminium damper rods features 215mm of travel, 16-step rebound damping adjustability and 16-step compression damping adjustability. The inner surface of the front fork outer tubes receives the same honing treatment as Honda's Works bikes for low-friction operation.
- Pro-Link rear suspension system features a single, fully adjustable Showa rear damper and 220mm of wheel travel, separate low-speed (13-step) and high-speed (3.5 turns) compression damping adjusters, and 17-step adjustable rebound damping.
- Large 50mm rear damper piston diameter provides consistent performance under demanding riding conditions.
- Front and rear wheels feature lightweight aluminium spoke nipples to help reduce unsprung weight.
- Optional 20" front wheel improves cornering traction and rider comfort.
- Large, 240mm front and rear brake rotors stopped by a compact and highly responsive dual-piston front brake calliper and lightweight single-piston rear calliper for optimum braking control.
- Lightweight rear brake system integrates the rear master cylinder and fluid reservoir, eliminating the need for a remote master cylinder reservoir and hose assembly.

Additional Features

- Carefully developed ergonomics position the rider's legs at the narrowest cross-section of the frame for improved comfort while maintaining excellent handling feel.
- Brake pedal and shift lever are designed to complement the riding position.
- Brake pedal features optimised ratio to match integrated rear brake master cylinder design.
- Seat cushion follows the shape of the fuel tank, providing a smooth transition to increase rider mobility and comfort.
- "Non-slip" seat cover for increased rider control.
- Wide, cleated stainless steel footpegs are improved for self-cleaning, corrosion resistance, provide excellent grip and fold for extra ground clearance.
- Cleated rear brake pedal, shift lever and folding shift lever tip are made of lightweight aluminium.
- Adjustable front brake lever for maximum control.
- Quick-adjust clutch perch.
- Dunlop D742 front and D756 rear tyres for optimum traction and cornering.
- Aluminium Renthal 971 bend handlebar.
- CR handlebar holders provide three different mounting positions: standard CR250R holder provides neutral position and optional holder (CRF450R/CR125R/CRF250R-type) provides +/-3mm fore or aft offset position to match rider preference.
- Works-type handlebar grips add to rider comfort.
- Front disc brake cover helps protect rotor and calliper from damage.
- Removable rear sub-frame allows easy maintenance.
- Washable, two-stage foam air filter for optimal engine protection and easy maintenance.
- Repackable silencer for maximum performance and minimal noise.
- Comfortable, durable controls and high-quality fasteners.
- Stainless steel clutch cable for long life.

Specifications**CR250R (ED-type)****Engine**

Type	Liquid-cooled 2-stroke single
Displacement	249.3cm ³
Bore x Stroke	66.4 x 72mm
Compression Ratio	9.0 : 1
Max. Power Output	43.6kW/8,000min ⁻¹ (95/1/EC)
Max. Torque	54.7Nm/8,000min ⁻¹ (95/1/EC)
Carburation	38mm Mikuni TMX flat-slide carburettor with Throttle Position Sensor (TPS)
Ignition System	Digital electronic with 3-D mapping and electronic advance
Starter	Primary kick

Drivetrain

Transmission	5-speed
Primary Reduction	3.000 (63/21)
Gear Ratios	1 1.800 (27/15) 2 1.470 (25/17) 3 1.210 (23/19) 4 1.000 (21/21) 5 0.869 (20/23)
Final Reduction	3.769 (49/13)
Final Drive	#520 roller chain

Chassis

Frame	Semi-double cradle; aluminium twin-spar
Dimensions (LxWxH)	2,185 x 821 x 1,275mm
Wheelbase	1,487mm
Caster Angle	27° 08'
Trail	111.7mm
Seat Height	950mm
Ground Clearance	347mm
Fuel Tank Capacity	7.6 litres
Dry Weight	96.6kg
Kerb Weight	104.7kg

Suspension

Type	Front 47mm Showa inverted leading-axle twin-chamber cartridge-type telescopic fork with 16-step adjustable compression and rebound damping; 315mm axle travel
	Rear Pro-Link with Showa single damper, adjustable low-speed (13-step) & high-speed (3.5-turn) compression and 17-step rebound damping; 314mm axle travel

Wheels

Type	Front 21 x 1.60 aluminium rim/wire spoke
	Rear 19 x 2.15 aluminium rim/wire spoke
Tyres	Front 80/100-21 51M
	Rear 110/90-19 62M

Brakes

Type	Front 240 x 4.5mm hydraulic disc with dual-piston calliper and sintered metal pads
	Rear 240 x 4.5mm hydraulic disc with single-piston calliper and sintered metal pads

All specifications are provisional and subject to change without notice.