

CRF150R

2008 Press Information



Introduction

The revolutionary CRF150R is the world's first high-performance four-stroke mini racer. It features a powerful and responsive Unicam engine, race-ready suspension and track-designed chassis for ground-breaking performance that has won attention, praise and races around the world. Grabbing the holeshot in its class, the CRF150R gives aspiring young riders everything they need to grow into racing experts, battle the competition and go for the gold.

Colours

- Extreme Red (with White number plate and sidecovers)

Features and Benefits

Engine/Drivetrain

- Powerful 149cm³ liquid-cooled 4-stroke 4-valve Unicam engine produces impressive power across a wide rev range for easy-to-control operation.
- Compact, lightweight engine assembly weighs only 19.8 kilograms.
- Unicam valve train features a single camshaft directly actuating two 26mm steel intake valves combined with twin, low-friction rocker arms actuating two 22.5mm steel exhaust valves. This compact design provides the light weight of a single-cam drive and an optimum combustion chamber shape for maximum power at all engine speeds.
- Crankshaft made of high-strength, low-carbon steel with carburized main journals for maximum durability at sustained high-rev operation.
- Forged slipper piston and rings are lighter than conventional designs, feature high 11.7:1 compression, and rev quickly while maintaining excellent cylinder sealing and high-rpm power.
- Double-carburized connecting rod utilises big-end needle bearing for maximum high-rpm performance and durability.
- Lightweight NiCaSil cylinder lining ensures cooler operation for extended engine life.
- Press-fitted aluminium spark plug pipe fits between the two exhaust rocker arms, further contributing to compact cylinder-head design.
- Gear-driven balancer reduces vibration and drives the water pump.
- Lightweight, compact, internal auto decompression and handlebar-mounted hot-start system ensure easy starting, hot or cold.
- 32mm Keihin FCR flat-slide carburettor features four rollers on the slide for light throttle effort, smooth operation, crisp throttle response and excellent rideability.



- Carburettor features throttle position sensor (TPS) that helps maintain linear response throughout the rev range.
- Vertically split crankcase features a built-in oil pump, reducing weight compared to conventional designs.
- Twin-sump lubrication system separates the oil supply for the crankshaft, piston and valve train from the clutch and transmission. This ensures a cool supply of oil to the clutch, eliminates potential clutch and transmission material contamination of the engine oil, reduces the amount of circulating oil and permits the use of a smaller oil pump.
- Rugged six-plate clutch has ample surface area to handle the engine's impressive torque, while carefully matched clutch springs provide a light feel at the lever.
- Durable close-ratio five-speed transmission.
- Exhaust system uses lightweight stainless exhaust header and repackable aluminium muffler.
- Dual radiators feature a refined core area for improved heat dissipation compared to conventional dual-radiator designs.

Chassis/Suspension

- Lightweight, high-tensile steel frame with large-diameter frame tubing and cross-member provides excellent turning performance and straight-line tracking.
- Removable sub-frame is strong and durable.
- Wide-section aluminium top and bottom triple-clamps position fork tubes far apart for excellent turning and control.
- Tapered-roller steering-head bearings enhance durability.
- 37mm inverted leading-axle Showa cartridge-type front fork features friction-reducing design to improve compression and rebound control.
- Front fork offers adjustable compression and rebound settings.

- Lightweight and rigid box-section aluminium swingarm.
- Pro-Link rear suspension system features fully adjustable Showa damper for superb compliance and wheel control.
- Unique CRF150R2 front and rear suspension settings deliver ideal bump absorption characteristics.
- Strong, lightweight wheels are durable and minimise unsprung weight.
- Lightweight front and rear disc brakes with high-performance pads offer powerful, precise braking control.
- Stout 15mm front and 17mm rear axles incorporate a surface treatment for added strength and durability.

Additional Features

- Lightweight plastic body components (radiator shrouds, sidecovers, rear fender, seat base, fuel tank, front fender and front number plate) feature a slim, aggressive style.
- Seat cushion foam 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.
- Large-capacity airbox and reusable two-stage foam air filter.
- High-quality Dunlop tyres.
- Handlebar bend optimises rider position and comfort.
- Adjustable front brake lever and compact master-cylinder assembly.
- HRC works-type rear brake system integrates the rear master cylinder and fluid reservoir, eliminating the separate rear master-cylinder reservoir and hose.
- Works-type handlebar grips add to rider comfort.



- Stainless steel clutch cable for long life and improved feel and action.

Specifications

General		
Model		CRF150R
Mold Type		ED-type
Engine		
Type		Liquid-cooled 4-stroke 4-valve SOHC single
Displacement		149cm ³
Bore x Stroke		66 x 43.7mm
Compression Ratio		11.7 : 1
Max. Power Output		16.6kW / 12,500min ⁻¹ (95/1/EC)
Max. Torque		13.6Nm / 10,000min ⁻¹ (95/1/EC)
Fuel System		
Carburation		32mm Keihin FCR flat slide carburettor with throttle position sensor (TPS)
Fuel Tank Capacity		4.3 litres
Electrical System		
Ignition System		Solid-state Capacitor Discharge (CDI) with electronic advance
Starter		Primary kick
Drivetrain		
Transmission		5-speed
Primary Reduction		4.117 (70/17)
Gear Ratios		2.214 (31/14)
	2	1.647 (28/17)
	3	1.318 (29/22)
	4	1.105 (21/19)
	5	0.956 (22/23)
Final Reduction		3.333 (50/15)
Final Drive		#420 roller chain
Frame		
Type		Semi-double cradle; steel tube
Chassis		
Dimensions		1,832 x 770 x 1,133mm
Wheelbase		1,260mm
Caster Angle		27° 2'
Trail		78mm
Seat Height		832mm
Ground Clearance		301mm
Kerb Weight		80.3kg
Suspension		
Type	Front	37mm inverted Showa leading-axle telescopic fork with adjustable compression and rebound damping; 275mm axle travel
	Rear	Pro-Link with single Showa damper, adjustable compression and rebound damping; 273mm axle travel

Wheels		
Type	Front	Aluminium rim/wire spoke
	Rear	Aluminium rim/wire spoke
Rim Size	Front	17 x 1.40
	Rear	14 x 1.60
Tyre Size	Front	70/100 17 (40M)
	Rear	90/100 14 (49M)
Brakes		
Type	Front	220 x 3mm hydraulic disc with single-piston calliper and sintered metal pads
	Rear	190 x 3.5mm hydraulic disc with single-piston calliper and sintered metal pads