

# CRF150R

**2009** Press Information



## Introduction

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With their powerful and responsive Unicam four-stroke engines, race-ready suspension and track-designed chassis components, the CRF150R and big-wheel CRF150R2 have revolutionised the small-displacement class and become familiar faces on winners' podiums around the world. Seasoned riders will appreciate the thrilling performance of a true Honda CRF ride. Aspiring young riders will revel in its big-bike performance and handling attributes. The CRF150R/CRF150R2 is the ideal tool for inspiring fun-filled exhilaration, confidence and a lifelong taste for winning!

## Colours

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- Extreme Red (with White number plate and sidecovers)



## Features and Benefits

### Engine/Drivetrain

- Powerful 149cm<sup>3</sup> 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 CRF150R 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.
- Stainless steel clutch cable for long life and improved feel and action.

### 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.



# Specifications

| General            |       |   |
|--------------------|-------|---|
| Model              |       | CRF150R   |
| Mold Type          |       | ED-type   |
| Engine             |       |   |
| Type               |       | Liquid-cooled 4-stroke 4-valve SOHC single  |
| Displacement       |       | 149cm <sup>3</sup>  |
| Bore x Stroke      |       | 66 x 43.7mm   |
| Compression Ratio  |       | 11.7 : 1  |
| Max. Power Output  |       | 16.6kW / 12,500min <sup>-1</sup> (95/1/EC)  |
| Max. Torque        |       | 13.6Nm / 10,000min <sup>-1</sup> (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 |