

## HONDA CRF450RX 2026

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**New 2026 Model:** The new CRF 450RX Enduro 2026 confirms its class-leading status for handling and stability, especially on the most challenging terrain, without sacrificing the agility that has always set it apart. The innovations introduced with the 2025 model have all been carried over to this version, from the frame and Showa suspension to the HRC-developed dual-piston brake caliper. Optimized mid-range torque delivery and power output beyond peak RPM ensure grip and traction.

On the electronics side, the package includes Honda Selectable Torque Control (HSTC) with three intervention levels, Launch Control, and the Engine Mode Select Button (EMSB). Among the main updates is the redesigned left side panel, which allows direct access to the air filter without the use of tools. The new graphics emphasize a more aggressive look, inspired by the official Enduro Team colors.

The **“Special” version** is available, equipped with components that further enhance performance and desirability.



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## **1. Introduction**

For 2017, Honda introduced a new race-ready enduro model into its off-road lineup: the CRF450RX. This model was built on the solid foundation of the CRF450R 17YM's engine and frame. It was Honda's first completely new 450cc motocross bike in eight years, featuring updates such as a larger fuel tank, 18-inch rear wheel, dedicated PGM-FI mapping, and suspension modifications.

The CRF450R was the perfect platform to build from, giving the CRF450RX the pure racing DNA needed to tackle any enduro challenge, along with the confidence to handle all kinds of terrain, taking on climbs, tight technical sections, and fast trails with ease.

Development mirrored that of the CRF450R. The 19YM version saw a significant increase in torque and peak power thanks to an HRC-developed cylinder head, as well as the introduction of HRC Launch Control, combined with optimized frame and swingarm rigidity balance, a new front brake caliper, and a Renthal Fatbar handlebar adjustable in 4 positions. Just like its motocross "sister," the 20YM version introduced the Honda Selectable Torque Control (HSTC) system.

The 21YM version marked a major evolution of the CRF450RX, starting from the same point as the nearly completely redesigned CRF450R 21YM developed by HRC. For 2022, the CRF450RX Enduro was further optimized with updated ECU settings and new suspension tuning.

In 2025, the CRF450RX was almost completely renewed. Compared to previous models, stability on rough terrain and cornering performance improved, with greater throttle control. Minor refinements define the 2026 model, which, in line with Honda's philosophy, remains an off-road tool designed to make it easier to go faster, for longer.

## **2. Model Overview**

Improving stability and control—especially on the toughest tracks—were the goals of the 2025 CRF450RX, now carried over to the 2026 model with a twin-spar aluminum frame that has been renewed by 70% in its structure and features a completely revised rigidity balance. In addition, new rear subframe mounting points, new upper and lower triple clamps including the steering stem, as well as a redesigned front axle and fork ends have been introduced, along with a different Pro-Link linkage progression.

The Showa suspension, completely revised in 2025 to ensure linear performance in both compression and rebound throughout the stroke, is carried over to the 2026 model. For easier maintenance, the rear shock absorber is now simpler to remove. HRC has also developed the new front brake caliper, obtained through a different machining process of the body combined with pistons and seals, resulting in greater precision throughout the entire race and further eliminating the "spongy" effect.

Throttle response, traction, and peak power of the UNICAM engine remain benchmarks thanks to the use of intake ducts and exhaust manifold, which channel airflow more directly.

The power unit is managed by the PGM-FI system with three selectable maps. The silencer complies with the new FIM noise regulations.

The radiator shrouds and new graphics perfectly complement the new left side panel, which allows direct access to the air filter without the use of tools.

### **3. Main Features**

#### **3.1 Frame**

- ***Twin-spar aluminum frame***
- ***Showa front and rear suspension for more linear performance throughout the stroke***
- ***Pro-Link linkage***
- ***Front brake caliper developed by HRC, more precise and consistent***
- ***Direct air filter access without the use of tools***
- ***7.7-liter fuel tank, aluminum side stand, and handguards with new shrouds specifically developed for enduro***

The CRF450RX YM26 remains the benchmark in terms of handling, maintaining greater straight-line and cornering stability, improved damping over rough terrain, and immediate feedback on front and rear grip.

The twin-spar aluminum frame is designed to improve overall chassis stability when tackling the most challenging tracks. The semi-double cradle, side spars, and cross members combine with the upper shock absorber mount and chain tensioner arm to deliver optimal torsional rigidity, enhancing stability and cornering performance.

Vertical torsional rigidity eliminates deformation effects and improves stability at high speeds; the rear subframe is mounted on offset plates (instead of directly on the main frame beams), reducing kinetic energy transfer (and consequent movement) to the rear structure of the bike, especially to the subframe tube section.

Special attention has been paid to the design of the upper and lower triple clamps and the steering stem, to achieve even more precise and linear suspension travel. The fork legs and front axle ensure optimal stability while reducing stiffness variation by 6% during compression. The swingarm is made of aluminum and measures 585.2 mm.

Steering head angle and trail: 27°27'/116 mm. Wheelbase: 1,478 mm. Ground clearance: 332 mm. Weight: 110 kg, with a weight distribution of 49.1% front and 50.9% rear (with fuel).

Suspension development aimed at achieving a more progressive and smoother fork response (reducing friction by 200% along the entire stroke) to ensure better riding feel.

The 49 mm Showa upside-down spring fork has 310 mm of travel and provides 16 clicks for rebound adjustment and 16 clicks for compression adjustment.

The Showa rear shock maintains consistent linear control throughout its stroke, with reduced friction in the final part. It offers 17 clicks for rebound adjustment, 3.5 turns for high-speed

compression, and 13 clicks for low-speed compression. The Pro-Link linkage system has an optimized ratio for more effective impact control.

Removing the shock absorber requires disassembling only four components, cutting removal and replacement time in half.

Drawing inspiration from official HRC race bikes, the dual-piston front brake caliper reduces lever play by 57% at high caliper temperatures, decreases lever pressure by 25% under thermal stress, and consequently reduces rider fatigue. The front disc is a 260 mm wave rotor; the rear single-piston caliper is paired with a 240 mm wave rotor.

The handguards effectively protect both controls and rider, while the forged aluminum side stand does not interfere while riding. Lightweight DID aluminum rims with spokes directly laced to the hub feature a black finish. Front: 21 x 1.6 inches, Rear: 18 x 2.15 inches. OEM tires are Metzeler Six Days Extreme.

The bodywork profile ensures maximum rider freedom of movement. In particular, the honeycomb radiator shrouds are designed specifically for enduro use, along with the side panels that have been updated for YM26, allowing access to the air filter simply by pressing with one hand—no tools required.

Honda's design philosophy is retained, focusing on lightness, mass centralization, and rider-oriented ergonomics. The ease of moving legs forward and backward along the sides remains a strong point.

A new YM26 graphic emphasizes the model updates, with the Honda Wing prominently displayed on the front fender. The plastic fuel tank, designed by RedMoto, has a capacity of 7.7 liters.

The LED headlight mask integrates seamlessly with the CRF's design. The robust racing-style rear fender with integrated license plate holder enhances resistance to impacts typical of extreme off-road use.

Standard equipment includes the lightweight, ergonomic, and adjustable Renthal Fatbar handlebar. The upper triple clamp offers two mounting positions, allowing the handlebar to be moved forward or backward by 26 mm. Rotating the mounts 180 degrees provides an additional 10 mm of adjustment from the base position, offering a total of four riding positions.

### **3.2 Engine**

- ***Direct airflow for immediate throttle response, especially in tight corners.***
- ***Long exhaust header for improved mid-range power delivery control.***
- ***Unbeatable traction and remarkable performance beyond peak engine power.***
- ***High-efficiency radiators equipped with a cooling fan.***

The improvement in throttle response, mid-range torque, and performance beyond peak power is the result of HRC's development of the 449.7 cc Unicam 4-valve engine in its YM26 version. The ultimate goal of making tight-corner exits much quicker and easier has been achieved, as well as enabling more aggressive, decisive, and extended use of 3rd gear.

The airflow path feeding the intake system – air intake, airbox, intake funnel, and 44 mm throttle body – follows a direct route with less resistance, resulting in better throttle control. This is complemented by a lengthened exhaust system, which delivers very manageable power both at low and mid-range rpm, while the dedicated PGM-FI injection settings for enduro complete the engine's differentiated performance characteristics. Furthermore, the silencer is made of heat-treated aluminum for better resistance against boot impacts and complies with the new FIM noise regulation of 109 dB.

Bore and stroke remain unchanged at 96 mm x 62.1 mm with a compression ratio of 13.5:1. A gear position sensor allows the use of three ignition maps specific to 1st and 2nd, 3rd and 4th, and 5th gear. The 8-plate hydraulic clutch improves lever control and feel while also ensuring consistent play in demanding riding conditions. Slippage is virtually eliminated, even at maximum power.

Solid reliability has always been a key factor in the CRF450RX's success, with lubrication managed by a scavenge pump featuring two 12 mm gears and a 5-hole piston oil jet. The CRF450RX also comes equipped with a cooling fan to maintain consistent operating temperature even on the slower, more technical enduro trails.

### **3.3 Electronics**

- ***Honda Selectable Torque Control (HSTC) with 3 Riding Modes (plus OFF)***
- ***HRC Launch Control system with 3 start options***
- ***Engine Mode Select Button (EMSB) for map selection***
- ***HRC setting system to customize Aggressive and Smooth modes***

The HSTC torque control system on the CRF450RX works to minimize rear wheel slip during acceleration (which results in a loss of drive), thereby maximizing the bike's traction. It does not use wheel speed sensors and maintains excellent throttle feel. It operates by retarding ignition and optimizing fuel injection when sudden, excessive changes in engine speed are detected, which are incompatible with effective forward drive.

Three levels, or modes, can be selected by the rider depending on the track conditions and needs:

In **Mode 1**, the system intervenes very little and only after persistent slip—typical when exiting slow corners, where the rear wheel struggles to contain the explosive power delivery of the engine in lower gears.

In **Mode 3**, the system intervenes more frequently and decisively—ideal for very slippery surfaces such as loose terrain or mud.

In **Mode 2**, intervention is intermediate, balancing between the extremes of a dry track with good grip and a wet, muddy track.

By pressing the HSTC button for half a second, the system cycles from Level 1 to 2, then to 3, with a green LED flashing as confirmation: one flash for Mode 1, two flashes for Mode 2, three flashes for Mode 3. The system can also be completely switched off. At every engine restart, the last selected setting is retained.

The **launch control indicator**, EFI warning light, EMSB mode button, and LED indicator are all grouped together on a single cluster on the left side of the handlebar, which now also integrates the HSTC button.

By holding the HSTC button for 0.5 seconds, the system switches to the next mode, confirmed by the green LED flashing once (Mode 1), twice (Mode 2), or three times (Mode 3).

The **HRC Launch Control** provides the rider with the best option for instant starts from a standstill, offering three selectable modes:

Level 3: 8,250 rpm – muddy surface / beginner

Level 2: 8,500 rpm – dry surface / amateur

Level 1: 9,500 rpm – dry surface / expert rider

Activating HRC Launch Control is simple: with the engine running, press the starter button. The LED flashes once to indicate Level 1 selection; pressing the starter button again for at least half a second makes the LED flash twice for Level 2; repeating the procedure makes the LED flash three times to confirm Level 3 has been selected.

The **Honda EMSB (Engine Mode Select Button)** map selection system is also confirmed, allowing the rider to instantly adapt engine power delivery to track conditions. With the bike stationary at idle, pressing the button for just under a second cycles through the maps in ascending order. A quick press of the button displays the currently active map, confirmed by the corresponding number of LED flashes (1 flash for Map 1, etc.). Each new selection is always confirmed by the same flash system.

**Map 1 – STANDARD:** uses the standard ignition and injection timing combination to deliver a balanced output of power and torque.

**Map 2 – SMOOTH:** softer character, offering a smoother throttle response, ideal for low-grip surfaces.

**Map 3 – AGGRESSIVE:** the sportiest, delivering consistently sharp and aggressive power and torque response.

The map selection indicator LED is blue.

The **HRC setting tool** can provide very different riding modes: from a smoother throttle response suited for beginners to a highly aggressive mode with hypersensitive throttle and engine response for professional riders.



## **CRF450RX SPECIAL**



For the 2026 model as well, Honda RedMoto is offering a **special version** enriched with highly appealing racing parts, including:

- Kite front wheel with billet aluminum hub, red anodized, and black anodized Excel rim
- Kite rear wheel with billet aluminum hub, red anodized, and black anodized Excel rim
- AXP skid plate including linkage protection, made of high-density polyethylene
- Bi-metal sprocket, red aluminum hub, and steel teeth
- X-Trig Rocs triple clamps, billet aluminum, red anodized
- X-Trig handlebar mount risers in aluminum
- Blackbird seat cover in HRC style
- Blue silicone radiator hoses
- Billet aluminum axle pullers, red anodized
- Billet aluminum rear brake master cylinder cap, red anodized
- Enlarged rear brake master cylinder reservoir in billet aluminum
- Billet aluminum rear brake rod
- Safety cable bracket for rear brake lever
- Simplified electrical system
- Red anodized aluminum engine cap kit
- Rekluse clutch cover
- Magura hydraulic clutch master cylinder
- Vibram frame protectors with super grip effect

As optional equipment on request, the bike can be further fitted with:

- Reinforced Rekluse Core Manual Clutch
- Rekluse Radius CX Automatic Clutch

- Full Akrapovič exhaust system
- Serbatoio in fibra di carbonio CMT

#### **4. Technical Specifications CRF450RX 2026 (special)**

ENGINE	
Type	Liquid-cooled 4-stroke single cylinder uni-cam
Displacement	449.7cc
Bore ´ Stroke	96.0mm x 62.1mm
Compression Ratio	13.5:1
FUEL SYSTEM	
Carburation	Fuel injection
Fuel Tank Capacity	7,7L
ELECTRICAL SYSTEM	
Starter	Electric
DRIVETRAIN	
Clutch Type	Wet type multi-plate
Transmission Type	Constant mesh, 5-speed,manual
Final Drive	Chain
FRAME	
Type	Aluminium twin tube
CHASSIS	
Dimensions (L´W´H)	2,175 x 839 x 1,280mm
Wheelbase	1,478mm
Caster Angle	27°27'
Trail	116mm
Seat Height	958mm
Ground Clearance	332mm
Weight	110kg
SUSPENSION	
Type Front	Showa 49mm USD fork – 310mm stroke



Type Rear	Showa monoshock using Honda Pro-Link 308mm Axle travel
WHEELS	
Type Front	21 x 1.6in Aluminium, spoke nipple
Type Rear	18 x 2.15in Aluminium, spoke nipple
Tyres Front	90/90-21 Metzeler Six Days Extreme (Michelin Enduro II)
Tyres Rear	140/80-18 Metzeler Six Days Extreme (Michelin Enduro II)
BRAKES	
Front	Single 260mm disc
Rear	Single 240mm disc
ADDITIONAL FEATURES	
Electronics	HRC Launch Control HSTC

\* All specifications are provisional and subject to change without notice.