

KX450F 2012

**NEW
MODEL**



Specifications:

KX450FCF

Engine Type	4-Stroke, Liquid Cooled, DOHC, 4-Valve, Single
Displacement	449.0 cm ³
Bore & Stroke	96.0 x 62.1 mm
Compression Ratio	12.5:1
Fuel System	Digital Fuel Injection, Keihin 43 mm Throttle Body
Ignition	Digital DC-CDI
Transmission	5-Speed
Rake/Trail	26.9°/ 113 mm
Front Wheel Travel	314 mm
Rear Wheel Travel	315 mm
Front Tire Size	80/100-21 57M
Rear Tire Size	120/80-19 63M
Front Suspension	48 mm Inverted Kayaba AOS with DLC coating and 22-Way Compression, 20-Way Rebound Damping Adjustment
Rear Suspension	Uni-Trak with Adjustable Preload, 22-Way (Low Speed), 2 Turns of Stepless (High Speed) Compression Adjustment, 22-Way Rebound Damping Adjustment, Temperature Compensating Rebound Adjustment
Wheelbase	1,480 mm
Front Brake	Rigid Mount 250 mm Petal Disc & Dual Piston Calliper
Rear Brake	240 mm Petal Disc & Single Piston Calliper
Fuel Tank Capacity	6.2 litres
Ground Clearance	330 mm
Seat Height	955 mm
Curb Mass	113.0 kg
Colours	Lime Green

(Specifications subject to change without notice.)

Key Features:



Easy Starting Digital Fuel Injected Engine



New Shorter FIM Approved Muffler



Push Button Launch Control



Keep the good times rolling.

Kawasaki
Let the good times roll.

2012 KX450F

High-Performance Digital Fuel Injected Engine

Complementing the race-winning performance of its predecessor's highly acclaimed engine and nimble high-speed chassis, the 2012 KX450F adds numerous new factory-inspired features designed to give serious riders an edge on the track. The motocross industry's first production-use Launch Control Mode, a new ECU with three easily-selectable maps, and adjustable ergonomics that allow riders to fine-tune the riding position to suit their size and riding style make the new KX450F an even more potent weapon on the track.

Key Features

- Launch control mode aids starting on slippery surfaces
- 3 easily changeable DFI maps
- Optional Kawasaki Racing Software FI Calibration Kit (same as used by the factory teams) available for further DFI fine tuning
- Adjustable ergonomics
- Slimmer riding position

NEW for 2012

ENGINE

Launch Control Mode

- Similar to the system used on the Monster Energy® Kawasaki factory racers, allows riders to activate a separate engine map designed to assist them get hole-shots by pressing a button. The Launch Control Mode map retards ignition timing, allowing the tire to gain grip in low-traction situations, and allowing riders to focus on their lines.



- Even for top-level riders, controlling the massive power of the KX450F off the start requires a high degree of throttle control and clutch finesse. By slightly reducing this power, Launch Control Mode helps riders maximize traction and increase the chance of getting a good start.
- Launch Control Mode has the greatest effect within the first few seconds of releasing the clutch off the start – the most crucial time to get ahead of rivals for better positioning going into the first corner.
- Activated by depressing the launch control button, located at the left handlebar, for two seconds or more while in neutral, first or second gear. When activated, the indicator lamp next to the button Flashes quickly to let the rider know the system is engaged.
- The system automatically disengages when the transmission is shifted to third gear, switching back to the normal engine map.
- The Launch Control Mode indicator light also serves as a warning light if the DFI system malfunctions.

NEW Easier DFI tuning

- New system allows riders to change DFI settings by simply replacing a coupler located on the right side of the steering stem.
- Riders can choose between Standard, Hard or Soft terrain settings to suit riding conditions.



- Further tuning options are still available for more advanced users who wish to use the optional Kawasaki Racing Software Kit – which is now compatible with 64-bit operating systems (such as Windows 7) as well as 32-bit systems (Windows XP, Vista) – to customize data maps.

Increased Engine Performance

- Revised bridged-box bottom piston idealizes rigidity for increased mid- to high-rpm performance.
- A 0.2 mm thinner top piston ring and revised surface treatment on the oil ring reduces friction and helps increase engine response at all rpm.
- Revised intake cam profile increases valve lift by 0.4 mm for more low- to mid-range performance. At idle a smaller portion of intake air is diverted to the bypass circuit to further improve response when the throttle is first opened.
- New tapered stainless steel exhaust pipe, tapered joint between the exhaust pipe and muffler, and redesigned shorter muffler contribute to increased performance at all rpm.
- To ensure a stable fuel supply during hard riding the fuel pump features a unitised plastic fuel filter cover that wraps around the inlet port and acts as a fuel trap. Unitising the filter cover, changing its material from rubber to plastic and eliminating the fuel return hose from the pressure regulator contribute to weight reduction.

NEW Improved Shift Feeling

- Increasing the number of engagement dogs and slots from three to four and revising the angles of the dogs and slots for better gear engagement. The idealised amount of play also contributes to improved shift feeling.
- 0.9 mm shorter shift fork stroke reduces the load when changing gears, contributing to the improved shift feeling.
- 2.8 mm wider first gear increases durability.

NEW Increased Rear Wheel Traction

- Newly-designed reinforcing ribbing in the new frame's swingarm bracket area revises the frame's rigidity balance to help increase rear-wheel traction and provide a more solid feeling when landing jumps.
- Rear suspension tie rod arms are 2 mm narrower for less rigidity, resulting in a smooth suspension action with firm feel that contributes to the increased rear wheel traction.

- Revised front and rear suspension settings complement the new frame rigidity balance.

NEW Slimmer, Adjustable Cockpit

- Redesigned upper frame rails reduce width 4 mm and combined with the new smaller and slimmer radiator shrouds (with larger openings for increased cooling) provide a narrower riding position to facilitate control. Flush seams with the shrouds, seat and new smaller side covers ease rider movement for better control.
- The top of the fuel tank was lowered to complement the new straight-line design seat, which has firmer foam, forming a flatter riding position for greater freedom of movement.
- New upper triple clamp provides two mounting positions for the reversible handlebar clamps so that the handlebars can be set in one of four positions with a 35 mm range of adjustment.



- The footpeg brackets can be mounted in two positions, allowing the rider to adjust the centre of gravity by 5 mm.

Lighter Handling

- Narrower 80/100-21 front tire size contributes to lighter handling. It's also lighter and combined with the rigid-mount front disc with an aggressive new petal design that reduces unsprung weight.
- 60 mm shorter muffler helps centralise mass and adds to the lighter handling characteristics.

Factory Style

- Blue finish on the oil filler, fly wheel nut and timing inspection caps contribute to factory looks.



- Embossed design on the clutch cover designed to gradually appear as contact from riding boots wears off the black paint.
- Front fender, shrouds, seat and rear fender form a green "flow line" that travels from the front of the bike to its rear.

Digital Fuel Injection system

- 43 mm throttle body provides easy starting, sharp throttle response, stable fuel delivery over jumps and whoops, and automatically compensates for changing atmospheric conditions to eliminate the need for changing jetting.
- No battery system. Large-diameter generator provides necessary power to run the system from the initial movement of the kick starter. Combined with the revised Automatic Compression Release allows the KX450F to be started easily with one kick.
- 60-micron ultra fine atomising fuel injector adopted from Kawasaki's Ninja ZX-10R supersport machine and mounted at a complimentary angle to the intake port to enhance mid-range power delivery.
- Progressive throttle link opens the throttle valve slowly when the throttle grip is initially turned, then progressively increases the speed at which the valve opens for smoother throttle response.

Kawasaki Racing Software Kit (Optional)

- Available through Kawasaki Dealers, an optional user setting tool works with both the KX250F and KX450F and allows the compact, lightweight ECU's data maps for fuel injection volume and ignition timing to be reprogrammed with the same Kawasaki Racing Software program used by Monster Energy® Kawasaki. There are seven preset maps or more advanced users can create their own maps so that engine characteristics can be adjusted to suit individual rider preference. The tool can also be used to log up to six hours of data such as rpm and throttle opening.
- Optional DFI indicator light is also available to indicate any potential DFI faults and allow diagnosis of trouble codes. Launch Control warning light also works as DFI diagnosis or trouble codes.

High Performance 4-stroke engine

- Aluminium cylinder with chrome composite plating provides rapid heat transfer, superb wear resistance and optimum lubrication retention for increased performance and durability.
- High-performance piston, featuring the same design used on our factory racers, contributes to improved performance at all rpm. A short skirt, reinforced external ribs and the industry's only mass-production use of a bridged-box bottom, featuring fully flush internal bracing, results in a lighter, stronger piston.
- Semi-dry sump lubrication system for quicker engine response. The majority of oil is stored in the transmission to keep excess oil away from the crankshaft and prevent power-robbing stirring loss. With only a shallow chamber to collect oil at the bottom of the crankcase, where a scavenge pump moves it to the transmission, the crank is located as low as possible to help lower the centre of gravity.

4-Valve Cylinder Head

- Lightweight titanium valves reduce reciprocating weight. The intake valve is made of a high-strength titanium alloy for durability.
- Valves are coated with an oxidised membrane treatment to resist wear. 36 mm intake and 31 mm exhaust valves.
- Dual, progressive, valve springs help ensure reliable valve control and reduce cylinder head height.
- Screw-type automatic cam chain adjuster maintains precise valve control and requires no maintenance. The adjuster also eliminates the possibility of vibration resulting from a loose cam chain.

Aluminium Perimeter Frame

- Composed of a combination of forged, extruded and cast parts, the aluminium frame is designed with a balance of torsional and longitudinal rigidity for quick handling and stability.
- Design emphasis on providing maximum traction under acceleration. Special chassis dimensions (swingarm pivot, output shaft, linkage mounts, and rear axle) placed to prevent chassis squat and improve traction.
- Wide footpegs are located high for optimum cornering clearance, and the frame is narrow at the peg mounts for improved riding position and cornering clearance.

Uni-Trak Rear Suspension

- Uni-Trak rear suspension linkage ratios suit the aluminium frame and swingarm. The linkage mounts underneath the swingarm allowing additional rear suspension travel yet maintaining a low seat height. The additional rear travel offers improved suspension action over a wider range of track conditions.
- Dual compression adjustability allows high-speed and low-speed damping to be tuned separately.
- The inside of the shock reservoir has friction-reducing Kashima Coat for improved suspension action.

Kayaba AOS Cartridge Fork

- Diamond-Like Carbon (DLC) coating on the inner fork tubes resists scratching and lowers friction for improved fork response.
- Outer fork tube shape works with upper triple clamp shape to optimise rigidity balance for better handling
- Fork tube guards wrap around the lower fork tubes for better protection.
- Friction-reducing Kashima Coat on the inside of the outer fork tubes helps improve suspension action.
- The Kayaba twin-chamber fork keeps oil and air in separate chambers for stable damping performance lap after lap.
- Damping settings, cylinder compression piston assembly, and Travel Control Valve (TCV) offer class leading fork action and rider feel.
- Fully-adjustable damping allows the suspension to be tuned for specific conditions.

Detail Features

- A works-style Renthal (standard-type, K971 bend) aluminium handlebar is light yet strong.
- Black wheels, triple clamps, and lightweight magnesium clutch, generator and cylinder head covers complement Kawasaki's racey lime green colour.

- Optional engine parts include magneto rotors with different inertias (8.5, 9.5 kg.cm²; STD: 9.0 kg.cm²).
- Optional chassis parts include handlebar holders for a \varnothing 28.6 mm bar (STD: \varnothing 22.2 mm), aluminium and steel rear sprockets (48-52T; STD: 50T), solid petal brake rotors for wet races, and different springs for the front fork (4.6, 4.8 N/mm; STD: 4.7 N/mm) and rear shock (52, 56 N/mm; STD: 54 N/mm). Also optional 1 mm longer rear link to lower rear suspension.

Authentic Kawasaki Accessories

- See www.kawasaki.com.au for all of the latest Authentic Kawasaki Accessories available for this model.





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