



2009 MODEL INFORMATION

**MODEL
NAME**

KX250F

**MARKETING
CODE**

KX250W

RELEASE FIXÉ AU 17 JUIN 2008

Kawasaki
Let the good times roll.

Version: 17 Jun 2008

OVERVIEW ----- P.3

AT A GLANCE ----- P.5

KEY FEATURES

HIGH-REVVING ENGINE WITH FACTORY-STYLE TUNING ----- P.6

- Performance-related modifications
- Smoother shifting
- Other performance-oriented engine characteristics

FACTORY-STYLE CHASSIS COMPONENTS AND TUNING ----- P.8

- Lighter, slimmer chassis
- Superior rear-wheel traction
- Race-oriented suspension
- Factory-style and other race-oriented components
- Rider interface

ADDITIONAL FEATURES ----- P.13

- Engine
- Chassis
- Other

COLOUR(S) ----- P.14

SPECIFICATIONS ----- P.15



STAYING AT THE FRONT OF THE PACK

To keep the '09 KX250F at the front of the pack, it receives a number of major changes, including a new head, cylinder, piston and crankcases, a lighter, slimmer chassis sporting a low-friction coated fork and completely new bodywork designed to facilitate rider control.

The KX250F base package provides an excellent platform for race-experienced riders to win races in the top classes. Design of the highly rigid aluminium frame, suspension components and settings focused on delivering superb high-speed stability – especially in straight lines – to enable experienced racers to ride full out. And to deliver holeshot-winning performance – a key factor that can mean the difference between running up front and winning, or getting stuck mid-pack – chassis geometry and the high-revving 4-stroke engine's wide powerband were designed to maximise rear wheel traction. The combination is a proven race-winner, with multiple AMA Supercross Lites and Motocross Lites championships to its credit.

To ensure the Lime Green racers continue to run at the front, Kawasaki engineers further increased the KX250F's winning potential. Already a strength of the KX250F, high-rpm and over-run performance were further increased. Response when cracking open the throttle was improved. Modifications to the engine's lubrication system result in both improved performance and reliability. And changes to the transmission offer improved shift and clutch feel.

OVERVIEW

With the design of the new chassis, rigidity balance was re-evaluated to gain a more flexible, lightweight package. While maintaining the high-speed straight-line stability of the previous model, the '09 model was designed to offer lighter handling in tight corners. And to further increase chassis potential, the new KX250F features a low-friction titanium coating on its front forks – making it the first in its class with coated fork inner tubes.

Already acclaimed as the best looking motocrosser in the paddock, the new KX250F benefits from a new styling package that not only gives it sharper factory-racer looks but offers racers a slimmer rider interface to make it even easier to go faster.

The new KX250F – race-winning performance to run out front.



AT A GLANCE

NEW

Lighter, slimmer aluminium perimeter frame - P.8

All large frame parts were redesigned and make use of a new production method to achieve a lighter, slimmer chassis.

NEW

249 cm³ liquid-cooled, 4-stroke Single - P.6

Tuned for high performance, the wide powerband extends way into the over-rev. Modifications for '09 further increase high-rpm and over-run performance and ensure sharp response. Lubrication changes improve both performance and reliability.

NEW

Showa twin-chamber fork with titanium coating - P.9,10

Low-friction titanium coating (a class first) smoothes fork action. Revised damping settings contribute to lighter handling and improved ride feel. Kashima Coat further reduces friction.



NEW

Revised swingarm - P.8

New swingarm with revised rigidity contributes to increased ride stability and weight savings.

NEW

Rear shock absorber - P.10

Revised layout and damping characteristics increase bottoming performance and road-following ability. Dual compression adjustability offers a wide range of tuning options. Kashima Coat on the tank cylinder improves action.

Petal brake discs - P.11

Front and rear petal brake discs offer efficient braking performance.

New Uni-Trak rear suspension - P.8,9

Linkage mounts below the swingarm for more precise suspension tuning. Linkage ratios selected to maximise rear wheel traction.

NEW

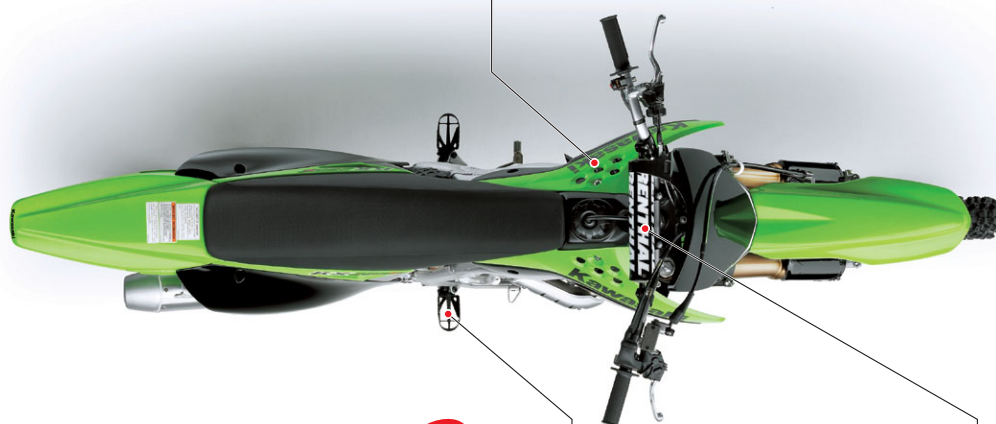
Slimmer radiator shrouds - P.11

Two-tone shrouds formed using a double-injection moulding process contribute to the slimmer package.

NEW

Smoother shifting - P.7

New shift mechanism with ratchet drive system contributes to improved shift touch.



NEW

Chassis dimensions - P.8,9

Centre of gravity and key chassis dimensions selected to minimise squat. Higher swingarm pivot, relocated upper engine mounts and other dimension fine-tuning contribute to increased rear wheel traction and riding stability.

NEW

Wider footpegs - P.12

Wider footpegs offer increased grip and improved feel.

Renthal handlebar - P.4

Factory-style handlebar and pad saves weight.

NEW

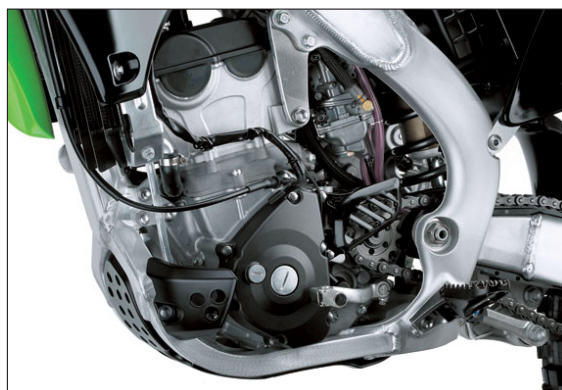
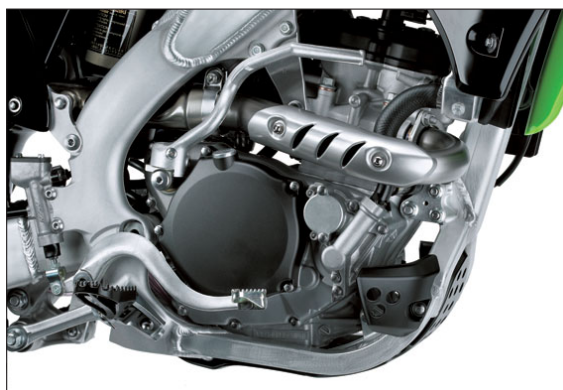
Factory styling - P.11

Factory-style graphics, black alumite rims and black fork guards give the new KX250F the looks to match its highly tuned performance.

KEY FEATURES

HIGH-REVVING ENGINE WITH FACTORY-STYLE TUNING

Tuned to best suit race-experienced riders, the 249 cm³ liquid-cooled, 4-stroke Single's wide powerband focuses on high-rpm performance and extends way into the over-rev. '09 engine modifications focus on further improving performance in the high-rpm and over-run ranges as well as ensuring sharper response. Revised lubrication improves both performance and reliability; changes to the transmission improve shift touch and clutch feel.

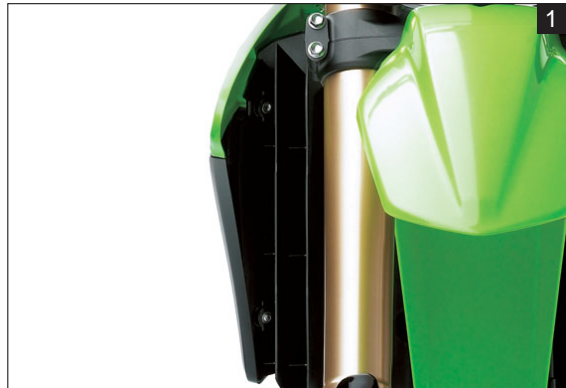


■ Performance-related modifications

- NEW** * New cylinder head has revised intake ports for improved performance at all rpm (especially in the high-rpm range).
- NEW** * During the cylinder head casting process, the cores for the intake ports were given a special coating to make the intake ports smoother. The extremely smooth surfaces that result increase intake efficiency across the rev range.
- NEW** * Revised cylinder head water jacket routes coolant via the front of the cylinder head for more even cooling performance.
- NEW** * New titanium exhaust pipe is tapered, expanding from 35 mm to 45 mm. Designed to increase performance at both low and high rpm, the new exhaust pipe offers improved throttle response at all rpm.
- NEW** * Changing the cam chain tensioner spring to one with lower load (44 N >> 31 N) reduces mechanical loss by approximately 30%.
- NEW** * A revised crank web increases offsetting moment for significantly increased crankshaft balance factor. At close to 60% (compared to 45% for the '08 model), the balance factor of the '09 KX250F is on par with our factory racers. The result is reduced engine vibration, smoother power delivery and increased performance in the mid-high rpm range.
- * High-capacity Denso radiators deliver superior cooling efficiency. The radiators are very slim and feature tightly packed cores and a fin design for excellent heat dissipation.
- NEW** * Increased radiator capacity (6%) comes care of 6.4 mm wider radiators.

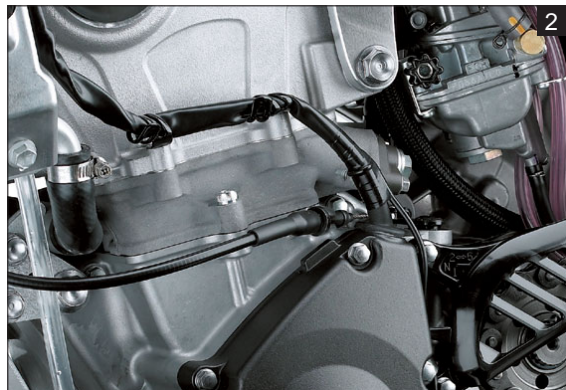
KEY FEATURES

- NEW** * Revised radiator louver design better directs cooling air to the radiators. (Photo 1)
- NEW** * Revised ignition timing improves feeling at low-mid rpm.
- NEW** * A reduction in engine oil (1.5 L >> 1.0 L) contributes to overall weight reduction and reduces mechanical loss in the transmission.



■ Smoother shifting

- NEW** * Newly designed gear shift mechanism offers improved shift feeling. Where the previous model used a gear driven system, the '09 KX250F features a ratchet drive system (like that on the KX450F). Lever ratios, spring rates and shaft locations were all re-evaluated.
- NEW** * Clutch cable holder is now unitised with the crankcase. The increased rigidity results in improved feel at the clutch lever. (Photo 2)



■ Other performance-oriented engine characteristics

- * The engine was tuned such that the torque curve follows the limit of running resistance for as long as possible. (Unchecked, engine torque can exceed this limit, resulting in wheel spin, which does nothing to help forward momentum.)
- * Efforts were made to achieve the widest possible torque band, so that traction efficiency would be maximised for a greater part of the rev range.
- NEW** * Lightweight titanium valves (IN: 31 mm; EX: 25 mm) reduce reciprocating weight and offer high-rpm reliability. The ultra-light valves have extremely thin valve stems on par with those found in supersport machines. The intake valves feature thicker heads for increased strength and both intake and exhaust valves are formed from a new, highly rigid, titanium material.
- NEW** * Transmission shafts are now spaced 1 mm further apart, allowing stronger gears to be used. A new oil passage in the crankcase (supplied by the scavenging pump) creates an oil shower, ensuring more effective lubrication of the transmission gears.
- * Sprocket-style chain drive roller helps smooth engine braking by reducing the effect of driveline lash when the rider gets off the gas quickly and play in the lower side of the chain suddenly tightens. The additional control facilitates corner entry.

FACTORY-STYLE CHASSIS COMPONENTS AND TUNING

The KX250F's slim aluminium perimeter frame is a lightweight construction composed of forged, extruded and cast parts. Chassis balance and settings were all set to suit race-experienced riders. The centre of gravity and key dimensions (swingarm pivot, output sprocket and rear axle locations) were chosen so that the rear tyre would drive the bike forward (instead of causing it to squat). For '09 revisions to the frame and suspension components were designed to offer greater manageability in tight corners while maintaining high-speed straight-line stability, lighter handling overall and a slimmer package.

■ Lighter, slimmer chassis

All the large parts of the new aluminium perimeter frame were re-examined for ways to trim weight. Revised dimensions and rigidity balance offer increased riding stability.

NEW * Upper engine mounts moved from directly over the engine to sides of the cylinder head, increasing rigidity. (Photo 3)

NEW * Newly designed main pipes, lower pipes and gusset pipes around the fuel tank feature revised cross sections.

NEW * The down tube is now formed with a swaging (squeezing and hammering) process and has a smaller cast bracket, further contributing to both weight savings and the revised rigidity balance.

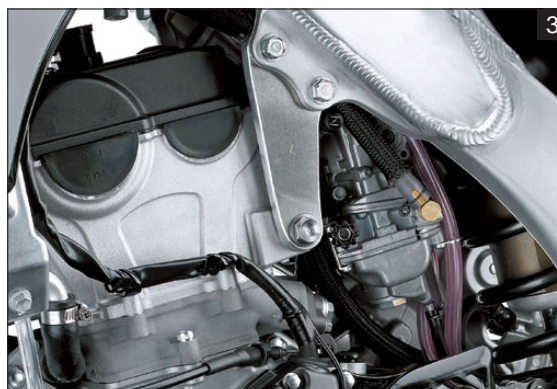
NEW * Lower cross pipe is now common with the KX450F.

NEW * Altogether, the parts revisions combine to give a weight savings of approximately 1 kg.

NEW * New swingarm has revised rigidity, which contributes to improved riding stability, and is approximately 400 g lighter. (Photo 4)

NEW * Swingarm construction is basically the same as that of the '08 model, but is more tapered than before and has a slightly D-shaped cross section.

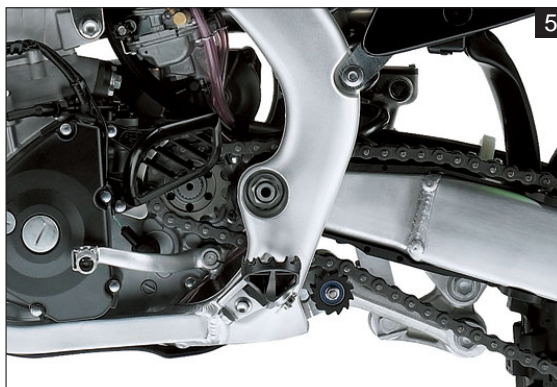
* The alloy swingarm uses a cast front section, tapered hydroformed spars and forged chain adjusters.



■ Superior rear-wheel traction

NEW

- * The swingarm pivot is located higher in the frame for improved rear wheel traction. (Photo 5)
- * The New Uni-Trak rear suspension system mounts the suspension arm below the swingarm, allowing a longer rear suspension stroke. The longer stroke in turn allows more precise rear suspension tuning.
- * Extensive rider testing was conducted to determine the ideal linkage ratios and rear shock absorber damping settings to achieve maximum rear wheel traction.



■ Race-oriented suspension

In addition to revised settings, the '09 KX250F gets the first use in its class of a low-friction coating on its front fork inner tubes.

NEW

- * Showa twin-chamber fork keeps oil and air in separate chambers for stable damping performance during long motos. Revised damping settings for '09 contribute to lighter handling and improved ride feel. (Photo 6)



KEY FEATURES

NEW

* A super-hard titanium coating on the outer surface of the inner fork tubes reduces sliding friction (stiction) and improves action, contributing to the smoother ride. The increased surface hardness of the dark navy blue coating also helps to prevent scratches and damage to the tubes. (Photo 7)

* Friction-reducing Kashima Coat on the inside of the fork outer tubes contributes to smoother suspension action (especially at the initial part of the stroke) and a better ride feel.

NEW

* Revised (more rigid) upper triple clamp and fork outer tubes offer optimised rigidity for improved performance when tracking over gaps.

NEW

* Fork offset reduced from 24.5 mm to 23.5 mm combined with the frame's revised rigidity balance and revised suspension settings results in lighter handling.

NEW

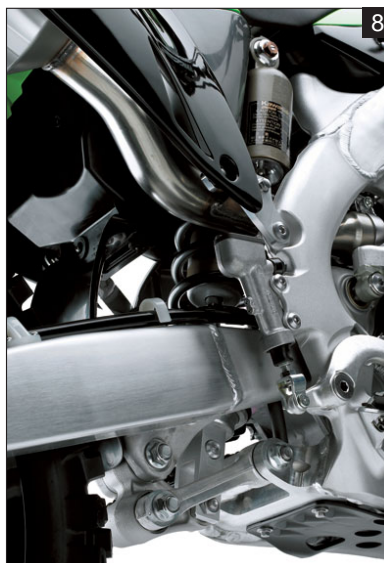
* New black fork guards wrap further around, offering greater protection for the inner tubes.

NEW

* New rear shock features a revised layout and revised damping characteristics. Improved damping and bottoming performance result in better ride feel and increased road-following ability. Piston diameter of 50 mm and piston rod diameter of 12.5 mm are unchanged from the previous model. (Photo 8)

* The rear shock features dual compression adjustability, allowing high-speed and low-speed damping to be tuned separately.

* The rear shock also features the Kashima Coat on the tank cylinder. The reduced friction smoothes suspension action.



■ Factory-style and other race-oriented components

* Among the KX250F's numerous factory-style components are its front and rear petal disc brakes. In addition to helping reduce unsprung weight, the wave shapes of the petal discs help clean the brake pads for more efficient braking performance. (Photos 9-10)



- * Rear caliper guard protects the caliper from damage.
- * A factory-style Renthal (standard-type) aluminium handlebar is standard equipment.
- * Rib-less rear hub and butted spokes reduced unsprung weight.
- * Rims are coated in black alumite – just like our factory racers.
- * Factory-style graphics complement the KX250F's highly tuned performance.

■ Rider interface

In addition to giving the '09 KX250F a stunning new look, completely revised bodywork was all designed with rider ergonomics in mind. The new components offer the rider an even slimmer interface, the natural position making it even easier for racers to go fast.

NEW

* New frame is approximately 6 mm slimmer across the main pipes.

NEW

* Formed using a double-injection moulding process, the new 2-tone shrouds contribute to a slimmer package. Fuel tank also revised accordingly. (Photo 11)



KEY FEATURES

NEW

* 2-tone side covers are also formed using a double-injection moulding process. Like the shrouds they contribute to the slimmer package. A hole in the right-side cover helps cool the silencer. (Photo 12)

* The frame widens at the ankles to offer the rider better grip and narrows near the bend below the seat to allow a slim riding position.

NEW

* New seat is slimmer and features a harder urethane for optimum rider ergonomics. (Photo 13)

* The seat uses a slip-resistant top surface for good grip when seated and smooth sides for excellent rider mobility.

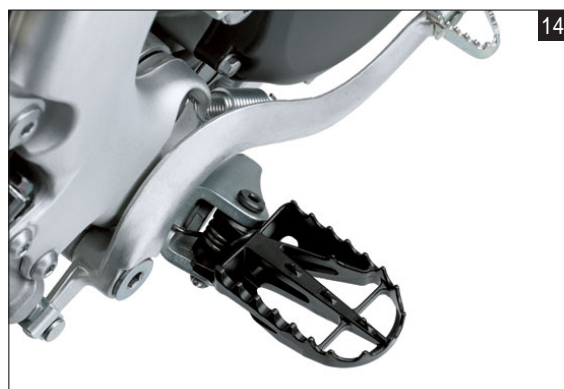
NEW

* New wider (front to rear) footpegs (46 mm >> 50 mm) offer riders increased grip as well as improved feel at the pegs. (Photo 14)

* The clutch cable boot features a large quick adjuster, making it easier for riders to adjust play in the clutch cable.

* Throttle grip has a unitised collar. The one-piece unit provides additional stability during throttle operation.

* Lightweight short-length grips feature a pattern designed to provide excellent grip.



ADDITIONAL FEATURES

■ Engine

- * A hot start system gives quick starts when the engine is hot. The hot start lever is unitised with the clutch lever.
- NEW** * Silencers meet AMA and FIM noise regulations: 99 dB for US models; 94 dB for European and Japanese models. (Photo 15)
- NEW** * Relocated scavenge oil filter screen (with revised shape) can be accessed without splitting the crankcases, facilitating maintenance.
- NEW** * Head gasket is now silicon coated, increasing sealing performance.



U.S. model shown

■ Chassis

- * Aluminium instead of steel is used on a number of components in order to save weight: the fuel tank fitting nuts, the seat mounting brackets, the front brake hose clamp. The upper mounting brackets for the plastic fork slider protectors were also eliminated.
- NEW** * Beefier sub-frame complements the heavier new muffler.
- NEW** * Larger synthetic skid plate replaces the small aluminium unit. The new skid plate offers greater protection without increasing weight. (Photo 16)
- NEW** * Larger front brake lever boot offers increased protection against dust. (Photo 17)



ADDITIONAL FEATURES

NEW

- * Narrower drive chain guide trims rubber parts for approximately 100 g weight reduction. (Photo 18)
- * Front/rear tyres and suspension settings vary by market to suit local conditions.



Other

- * Optional engine parts include magneto rotors with different inertias (3.6, 4.8 kg·cm²; STD: 4.4 kg·cm²) and a 12T output sprocket (STD: 13T).
- * Optional chassis parts include handlebar holder for a ø28.6 mm bar (STD: ø22.2 mm), aluminium and steel rear sprockets (46-50T; STD: 48T), solid petal brake rotors for wet races, different springs for the front fork and rear shock, a 1.85x20" front wheel (STD: 1.60x21"), and manual decompression lever & cable.

COLOUR(S)

- * Lime Green with new factory-style graphics



- * Ebony with Monster Energy graphics (USA/CAN/AUS)



SPECIFICATIONS

ENGINE		KX250W9F
Type	Liquid-cooled, 4-stroke Single	
Displacement	249 cm ³	
Bore and Stroke	77.0 x 53.6 mm	
Compression ratio	13.2:1	
Valve system	DOHC, 4 valves	
Fuel system	Carburettor: Keihin FCR-MX37	
Ignition	Digital AC-CDI	
Starting	Primary kick	
Lubrication	Forced lubrication, semi-dry sump	
DRIVETRAIN		
Transmission	5-speed, return	
Final drive	Chain	
Primary reduction ratio	3.350 (67/20)	
Gear ratios: 1st	2.142 (30/14)	
2nd	1.769 (23/13)	
3rd	1.444 (26/18)	
4th	1.200 (24/20)	
5th	1.045 (23/22)	
Final reduction ratio	3.692 (48/13)	
Clutch	Wet multi-disc, manual	
FRAME		
Type	Perimeter, aluminium	
Wheel travel: front	315 mm	
rear	310 mm	
Tyre: front	80/100-21 51M	
rear	100/90-19 57M	
Caster (rake)	27.7°	
Trail	122.3 mm	
Steering angle (left/right)	42° / 42°	

SUSPENSION	KX250W9F
Front: Type Compression damping Rebound damping Rear: Type Compression damping Rebound damping Spring preload	47 mm upside-down twin-chamber telescopic fork 16-way 16-way New Uni-Trak 13-way (low-speed), 2-turns or more (high-speed) 17-way Fully adjustable
BRAKES	
Front: Type Caliper Rear: Type Caliper	Single semi-floating 250 mm petal disc Dual-piston Single 240 mm petal disc Single-piston
DIMENSIONS	
Overall length Overall width Overall height Wheelbase Ground clearance Seat height Dry weight Fuel capacity	2,170 mm 820 mm 1,270 mm 1,470 mm 340 mm 955 mm 104.3 kg 8.0 litres

The specifications mentioned here apply to and have been achieved by production models under standard operating conditions. We intend only to give a fair description of the vehicle and its performance capabilities but these specifications may not apply to every machine supplied for sale. Kawasaki Heavy Industries, Ltd. reserves the right to alter specifications without prior notice. Equipment illustrated and specifications may vary to meet individual markets.