

2017 KX450F

2017 KX450F, LIGHT & FASTEST 450cc MOTOCROSSER




Light and powerful, the 2017 KX450F provides sharp handling and strong circuit performance that will dominate the 450cc motocross class. Combining the light engine and chassis makes the KX450F the lightest 450cc Kawasaki Motocrosser, while a slim chassis and the powerful engine result in sharp handling and excellent circuit performance.

The enhancements made to the KX450F have maintained the KX design philosophy which stretches back to the creation of the KX brand more than 40 years ago; place mid-level to expert riders on the top step of the podium, every time.

Engine	
Type	Liquid-cooled, 4-stroke Single
Displacement	449 cm ³
Bore and Stroke	96.0 x 62.1 mm
Compression ratio	12.8:1
Valve system	DOHC, 4 valves
Fuel system	Fuel injection: ø43 mm x 1 (Keihin)
Ignition	Digital DC-CDI
Starting	Primary kick
Lubrication	Forced lubrication, semi-dry sump
Drivetrain:	
Transmission	5-speed, return
Final drive	Chain
Primary reduction ratio	2.727 (60/22)
1st	1.750 (28/16)
2nd	1.412 (24/17)
3rd	1.188 (19/16)
4th	1.000 (19/19)
5th	0.875 (21/24)
Final reduction ratio	3.846 (50/13)
Clutch	Wet multi-disc, manual
Frame:	
Type	Perimeter, aluminium
Wheel travel:	
Front	305 mm
Rear	305 mm
Tyre:	
Front	80/100-21 51M
Rear	120/80-19 63M
Caster (rake)	28.0°
Trail	125 mm
Steering angle (left/right)	42° / 42°

Suspension	
Front	ø49 mm inverted telescopic SFF-AIR TAC (Separate Function front Fork Air Triple Air Chamber) with adjustable compression damping and rebound damping
Rear	New Uni-Trak with adjustable dual-range (high/low-speed) compression damping, adjustable rebound damping and adjustable preload
Brakes	
Front:	Single semi-floating ø270 mm petal disc
Caliper	Dual-piston
Rear:	Single ø240 mm petal disc
Caliper	Single-piston
Dimensions	
Overall length	2,195 mm
Overall width	820 mm
Overall height	1,280 mm
Wheelbase	1,495 mm
Ground clearance	335 mm
Seat height	950 mm
Curb mass	108.8 kg with full tank of fuel
Fuel capacity	6.3 L

Colours	
	
Lime Green	
<p>Specifications mentioned here apply to & have been achieved by production models under standard operating conditions. We intend only to give a fair description of the vehicle & performance capabilities. These specifications may not apply to all machines supplied for sale. Kawasaki</p>	

Heavy Industries Ltd reserves the right to alter specifications. Equipment illustrated & specifications may vary to meet individual markets.



Hard Hitting, Fuel Injected, 4-Stroke Power

Fuel-injected 449 cm³ liquid-cooled, 4-stroke Single delivers hard-hitting power from low- through high-rpm. The broad powerband and responsive throttle offer a broad spread of torque response that enables racers to get on the gas and go even from down low. Race-inspired tuning and parts like the high-performance bridged-box bottom piston (a mass-production first when introduced on the 2010 KX450F) ensure top-level performance right out of the box. Introduced in 2016, the offset cylinder and numerous changes to the intake system offer even more power, the exhaust system matches local regulations, and the accessory KX FI Controller enables map calibration without a PC. Like the chassis, the engine benefited from significant weight savings, with the engine group components weighing almost 2 kg less than the previous model!

Intake valves have a flat surface, with a slim throat angle and tight recess (similar to valves on supersport models) contributes to the awesome high-rpm performance. Air cleaner shape and silencer construction ensure that FIM and MA noise regulations are met.

Excess material was trimmed from transmission gears and shafts results in a weight reduction of approximately 260 g when compared to the previous model.



Slimmer, lighter aluminium perimeter frame

Aluminium perimeter frame is a narrow across the main beams, considerably lighter, and features revised rigidity contributing to greater front-end feel.

Width across the main frames is approximately 6 mm slimmer than the previous model. This facilitates position changes, making it easier for riders to slide forward and backward.

The lighter weight contributes to the bike's quicker handling.

Thick walls for the sub-frame (seat rails) offer increased strength. 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.

Slimmer, lighter aluminium perimeter frame

The narrow frame contributes to a slim overall package with good ergonomics. The slim riding position facilitates control.

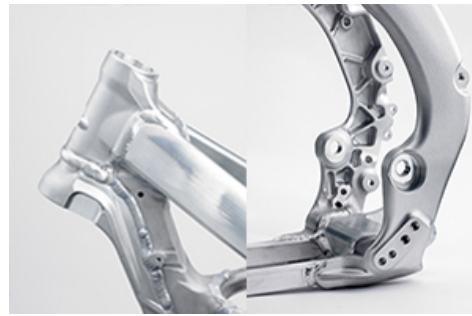
Previously an extruded part, the front down tube is now a combination forged/cast piece (front part is forged; rear part is cast). The combination of this design contributes to greater front-end feel.

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).



Light and narrow main frame

The lighter weight contributes to quicker turn-in and sharper overall handling.



Slimmer Shrouds

The inward-angled orientation of the radiators (turned in 10 degrees) allows the shrouds to be slimmer than before.

Top of the fuel tank is flat and low, for a very smooth progression from the seat to the tank. The flat design gives the rider greater freedom of movement when changing riding position, and facilitates sitting farther forward.



Launch Control Mode: The Holeshoot Advantage

KX motocrossers have long drawn on works technology to offer riders the best possible performance right out of the box. Launch Control Mode is just one of the factory features that give riders an edge when lining up at the start gate.

The KX450F features a launch control system similar to that on our factory racers. With the simple press of a button, riders can activate a separate engine map designed to ensure efficient race starts in slippery conditions. (The Launch Control Mode map retards ignition timing, allowing tyres to gain grip in low-traction situations, and allowing riders to focus on their lines.)



Setting-adjustable motocross ECU

Lightweight ECU was designed specifically to withstand the rigors of motocross racing. ECU contains three plug and play engine maps (plus a fourth for Launch Control Mode). Settings for the three maps can be reprogrammed with the optional KX FI Calibration Kit.





KX FI Calibration Controller (Accessory)

KX FI Calibration Controller, a portable handheld calibration tool, enables riders to make changes to engine maps by plugging into the ECU without needing a PC or battery. Comes equipped with seven preset map settings.



Compact and Light Throttle Body

43 mm throttle body is both compact and lightweight. Ultra-fine atomising injector with 12 holes sprays particles with a droplet size of 60 µm for smooth power delivery and improved engine response at partial throttle.



Fuel Injection System

Designed specifically for motocrossers, the fuel injection system incorporates a small lightweight ECU and operates without a battery to further eliminate unnecessary weight. And of course, fuel injection eliminates the need to adjust engine settings to suit track and climate conditions.

Factory Style Chassis, Components and Tuning

Matching the KX450F's lighter weight, the minimalist bodywork makes the bike look more compact. Its shroud, fender and number plate designs ensure it is the sharpest looking bike in the paddock. For 2017 Kawasaki's first in-mould graphics, used on the shrouds, result in an ultra-smooth surface and ensure the racy graphics are not easily damaged. Factory-style graphics further reflect the KX450F's highly tuned performance, and green highlights on the suspension adjusters and engine oil cap and generator cover plugs contribute to a distinctive Kawasaki look.

Aggressive design of the front fender adds to the racy looks. Rims are coated in black alumite¹ – just like our factory racers. Fork and rear shock adjusters have a Candy Lime Green Type 2 alumite¹ finish like our U.S. factory racers. Embossed design on the clutch cover designed to gradually appear as contact from riding boots wears off the paint. Engine covers are finished in silver paint, further reinforcing the KX450F's factory image. Large synthetic skid plates with oval holes facilitates mud removal and keeps the weight down.

Other changes include:- 2017 a new design for the aluminium rear sprocket contributes to the bike's sharp looks.

2017 Upper and lower triple clamps redesigned based on feedback from Kawasaki's factory race teams offer improved stability on corner entry, enabling quicker turn-in.



Slim Rider Interface

Advanced Race Ready Suspension: SFF-Air Triple Air Chamber

The KX450F features Showa's SFF (Separate Function front Fork)-Air TAC (Triple Air Chamber). The works-replica fork is very lightweight and highly rigid, contributing to superior riding stability. With settings chosen for high-level to expert riders, the new fork offers excellent shock absorption performance at high speeds, making it easier for racers to ride faster.

Low-friction seals, and valve settings deliver and easy fork movement, matching the pitching characteristics to the lighter chassis.

Fork inner tubes feature lower rigidity, idealised for the chassis.



A digital hand pump is recommended to make adjustments - see your Kawasaki Dealer for the preferred pump (part # 999A423). Talk with your Kawasaki Dealer to find the best settings to suit your riding.



Narrow and Flat Seat

The rider position is slim, and thanks to the flat design of the seat and tank combination, making the ergonomics racer-friendly. The seat uses a slip-resistant top surface for good grip when seated and smooth sides for excellent rider mobility. Seat urethane helps maintain the original shape longer. Seams between the shrouds, seat and side covers are very flush, which facilitates control as well as moving around on the bike. Top of the fuel tank is low, allowing an even flatter progression from the seat to the tank. The flat design gives the rider greater freedom of movement when changing riding position, and facilitates sitting farther forward.

Race Oriented Suspension

The rear shock features dual compression adjustability, allowing high-speed and low-speed damping to be tuned separately. A self-lubricating alumite coating on the tank cylinder helps prevent wear abrasion, and reduces friction for smoother suspension action.

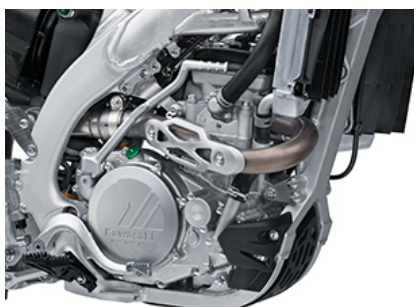
The New Uni-Trak rear suspension system mounts the suspension arm below the swingarm, allowing a longer rear suspension stroke. The longer stroke in turn allows more precise rear suspension tuning.

Extensive rider testing was conducted to determine the ideal linkage ratios and rear shock absorber damping settings to achieve maximum rear wheel traction.

Linkage ratios were also adjusted to suit the



new, lighter chassis.



Exhaust Pipe

The air cleaner shape and silencer construction ensures that FIM and MA noise regulations are met.

The KX450F's frame and minimalist bodywork, designed with rider ergonomics in mind, offer a slim rider interface and racer-friendly ergonomics.

Complemented by adjustable handlebar and footpeg positions, the natural riding position makes it even easier for racers to go fast.



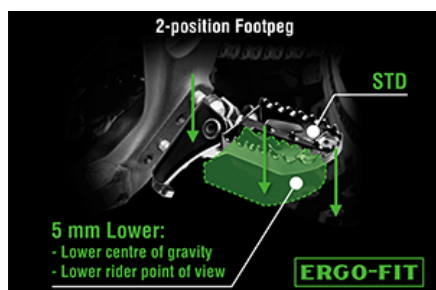
Adjustable Handlebar

Upper triple clamp with two sets of handle mount slots and reversible handle mounts offer riders a choice of four handle positions to choose from: 25 mm forward, 15 mm forward, standard and 10 mm back.



Swingarm

Rigidity of the swingarm has been optimised. The cast front portion uses a tall and thin sided walls construction, and the wall thickness of the spars has also been idealised, with thin side walls and thick top/bottom walls. The alloy swingarm uses a cast front section, tapered hydroformed spars and forged chain adjusters.



Adjustable Footpegs

Adjustable footpeg brackets enable riders to lower their footpeg position 5 mm.

In the lower position, Centre of Gravity is lowered as is the rider's point of view, adding to both physical and psychological stability.



Oversize Front Disc

Oversized semi-floating petal disc brake $\phi 270$ mm contributes to significantly stronger front brake force, as well as enhanced controllability. Complementing the large-diameter discs, a pushrod-type front brake master cylinder and front brake pads with a high coefficient of friction deliver strong braking force and superb control (especially for the initial bite and initial-mid stroke characteristics).



Rear Facing Air Intakes

Two rear intakes (holes added under the rear of the seat) allow air to enter the engine more easily, contributing to improved response.



Factory KX Styling

The minimalist bodywork and aggressive fender and front number plate designs ensure the 2017 KX450F remains the sharpest looking bike in the paddock.

- For 2017 Kawasaki's first in-mould graphics, used on the shrouds, result in an ultra-smooth surface and ensure the racy graphics are not easily damaged.
- Rims are coated in black alumite ? just like our factory racers.
- Candy Lime Green Type II finish on the oil cap and the two plugs on the generator cover further contribute to factory looks.
- Candy Lime Green Type II SFF-Air front fork caps.
- Showa TAC-SFF inner fork tubes have a Super-hard titanium coating to help resist wear and lower friction.
- Candy Lime Green Type II adjusters on the rear shock absorber.
- Black rear spring on the Showa rear shock.
- Embossed design on the clutch cover designed to gradually appear as contact from riding boots wears off the paint.
- Engine covers are finished in silver paint, further reinforcing the KX450F's factory image.



Colours



Lime Green

Kawasaki

Accessories for KX450HHF 2017 KX450F (2755)



AIR FILTER CLEANER

* Quickly and easily removes filter oil, dirt and other contaminants * Advanced formula removes super tacky air filter oils by breaking down and solubilising the oil * Easily washes out with water * Works with both foam and fabric air filter elements * Will not degrade foam, paper or glued air filter seams * For best results use with Kawasaki Performance Air Filter Oil * 64 US FLOZ (1892mL)



AIR PUMP - DIGITAL

AIR PUMP - DIGITAL. The essential tool for all owners of a 2015 Kawasaki KX450F. Features include: Hi-tech LCD display panel * 6063 aluminium barrel * Micro-adjust 2-3 psi air bleeder * Non-scratch rubber sealed system * Max pressure 300psi * Foldable hose.



CHAIN LUBE SYNTHETIC

* Advanced race proven formula designed for both on and off-road applications * Ultimate protection for your drive system from rust, corrosion, and premature wear * Super tacky formula resists "flying off" * Safe for O-ring and non O-ring chain types * 14 OZ (395g)



CLEANER WIPE DOWN

* High gloss formula specifically developed for the Powersports industry * Wipe down cleaner coats plastic, fiberglass and painted surfaces * Restores showroom shine in a few quick wipes * Makes cleaning process fast, simple and effortless * Leaves a clear coat film for extended protection against the elements * 12 US FLOZ (355mL)



COVER MOTORBIKE MEDIUM

* Bike cover Bike model fitment is a guide only.



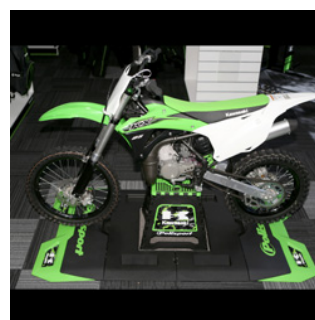
DETAILER WAX AND SHINE

* The All-In-One Detailer that cleans, shines and protects all painted surfaces, chrome parts, windshields and plastics * Carnauba wax formulation provides a deep show-like shine making your vehicles painted surfaces come to life * Easy spray applicator * 12 US FLOZ (355mL)



Folding MX Bike Stand and Mat

Folding MX Bike Stand and Mat, comes with Kawasaki branding sticker kit



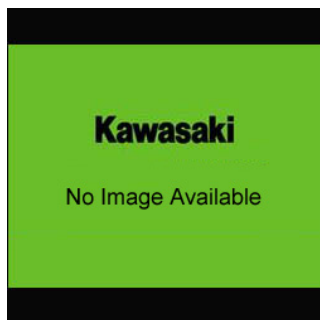
Folding MX Bike Stand and Mat

Folding MX Bike Stand and Mat, comes with Kawasaki branding sticker kit



KX CALIBRATION CONTROLLER KIT

The KX FI Calibration Controller is a handheld tool with a built in colour LCD screen. While the controller is designed to satisfy racers and expert riders, it is simple and hassle-free to use. Interacting with the ECU is accomplished simply by connecting the controller using the provided cables (no PC or battery necessary). The KX FI Calibration Controller contains seven preset settings that can be quickly and easily used to



KX FI CALIB SOFT UPGRADE

THIS PART IS ONLY REQUIRED TO BE USED IN CONJUNCTION WITH PREVIOUS KIT 99999-0240 TO UPGRADE OLD KIT FOR PROGRAMING OF 2011 MODEL KX2450F AND KX450F BIKES ONWARDS. THIS KIT IS NOT REQUIRED WHEN USING NEW KIT 99999-0289 * These items are intended for closed-course competition use only * Alteration of emissions-related components can constitute violation of



MOTO MINDER HOUR METER

* MM is an engine hour meter specifically designed for use in the harsh environment of motocross racing As such, it will operate reliably in a number of other applications * - Motorcycles - MM has been specifically designed for motocross racing * It is also useful for tarmac race bikes, ATVs, enduro bikes, karts etc * Note: MM will operate on the new generation "pencil coil" ignitions * - Marine - MM is fully spec'd for saltwater marine use * Applications include



PREWASH - ON AND OFF ROAD

* Unique formula breakdown dirt, grime and oils while gently protecting paint and other delicate finishes * Safe on plastics, carbon fiber, paint, anodizing, aluminum, titanium, rubber * Biodegradable cleaning formula * Contains no harmful acids, CFC's or solvents * Will not harm seals or brake pads * Spray on, wash off, go ride * 32 US FLOZ (946mL)

adjust the ECU to suit track conditions. The maps can be stored on a PC: data transfer between the controller and a PC can be done via SD card

federal and/or state laws and design rules * Substantial fines and penalties can result if used for other than closed-course competition use * Use of unauthorized components and use of a vehicle in competition can affect a vehicle's warranty coverage * Kawasaki Accessories used in competition are not covered by any warranty and are not returnable * Quantities may be limited and replacement parts may not be available

outboard motors, jet skis and other recreational and race craft * MM has a dual purpose input circuit * This means that the red sense wire can be cable tied along a sparkplug HT lead (Inductive Connection) OR it can be connected directly into a voltage supply (Direct Connection)



SHOWA FORK OIL FOR KX450-FFF

Kawasaki Hi-Performance Fork Oil, by SHOWA. Sourced from SHOWA Japan as a direct replacement oil for your O.E. SHOWA forks - Formulated specifically to meet the demands of today's hi-performance forks, including SHOWA SFF (Separate Function Fork) - SAE5W - 1 Liter - Please see your owner's /service manual for proper fork oil weight/type SHOWA SS-19, SAE5W, 1 Liter 44091-0009