



## Designed to win.

Fresh off consecutive Pro US Motocross & Supercross titles, Yamaha took the class-leading YZ450F and made it even better—more powerful, lighter, slimmer, with enhanced overall stability and more agility than ever! Introducing the all-new 2023 Yamaha YZ450F, because the best don't rest. Every rider is different. When Yamaha built the new YZ450F it was designed so that you can customize its engine and chassis characteristics to suit different riding conditions. And this is all made possible by the latest Power Tuner app that can transform your bike's performance without you even opening your toolbox.

A new 'Quick Setting' function makes it even easier to adjust the engine character – and a new lap timer function means that you can see which settings achieve the best results. And you can also adjust the behaviour of the traction control and launch control systems.



- Lighter, slimmer and more powerful engine
- Reduced weight and increased durability
- Increased air intake capacity
- New disc spring clutch
- Newly designed transmission
- Redesigned aluminium bilateral beam frame
- Seamless ergonomic bodywork
- Updated KYB suspension
- Adjustable traction control system
- Refined launch control system
- Extensively revised Power Tuner app

The best-in-class KYB forks now feature a hand adjustable compression damping adjuster – and with its new seamless bodywork, flat seat and revised ergonomics, you have the power to achieve total chassis control. New YZ450F: LIGHTER, SLIMMER, SHARPER, FASTER.

## **Lighter, Slimmer, Sharper, Faster.**

This is the Yamaha motocross bike that you've been waiting for. Lighter, faster and more powerful, the all-new YZ450F is a new kind of machine that's been developed with you, the rider, as the main focus. And every piece of technology you see here is designed to bring out your best performance out on the track.

The all-new engine is a perfect example of how Yamaha technology can make you a better rider. Its strong and linear power gives you the absolute control required to achieve faster lap times. And the refined Power Tuner app enables you make quick trackside adjustments to the engine character and traction control settings to match the conditions.

A new lightweight aluminium frame and updated KYB suspension deliver the cornering precision and straight-line stability you need stay ahead – and the compact new seamless bodywork combined with revised ergonomics give the ultimate rider mobility for maximum control when accelerating, braking and cornering.



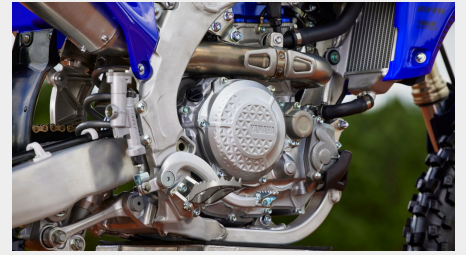
## Lighter, slimmer and more powerful engine

With a 5% increase in power across the rpm range as well as a harder hitting top end, this is the most powerful engine ever used in the YZ450F. Featuring a new piston, lightweight cylinder and redesigned crank assembly, this lightweight and compact new engine delivers strong and linear power that gives you plenty of easy to control performance at all engine speeds.



## Increased air intake capacity

A key feature on the YZ450F is its front facing intake that gives you a real competitive advantage. For increased performance the intake port is redesigned to give a much straighter path to the cylinder head. Together with larger 39mm titanium inlet valves, this high-efficiency intake enables the engine's rev limit to increase by 500rpm for increased performance.



## New disc spring clutch

To handle the extra power the YZ450F is equipped with a durable and compact one-piece steel clutch that reduces engine weight by 0.75kg and reduces engine width by 8.5mm. New disc springs are used instead of conventional coil springs, giving improved feel and a much lighter pull at the lever.



## Newly designed transmission

To match the engine's increase in overall power a newly designed transmission is fitted. The distance between the drive shafts has been widened and the diameter of each gear increased to reduce weight and enhance the strength of the 5-speed gearbox.



## Redesigned aluminium bilateral beam frame

The YZ450F's aluminium bilateral beam has been redesigned to provide a lighter feel and improved agility. The rigidity of the tank rails has been optimized to give a controlled amount of flex for improved shock absorption, and the down tube and cross tube are stiffened to ensure high levels of stability and precise cornering.



## Seamless ergonomic bodywork

The lightweight fenders, sidepanels and airbox cover blend seamlessly, and the narrow shrouds together with the reduced width around the bike's waist enable rapid body weight shifting for more effective handling performance. And for optimum controllability the YZ450F features a flat upper surface running from the rear of the seat through to front of the airbox.

## Engine

Engine type	4-stroke; Liquid-cooled; DOHC; 4-valves; Single cylinder
Displacement	450cc
Bore x stroke	97.0 × 60.8 mm
Compression ratio	13.0 : 1
Lubrication system	Dry sump
Clutch type	Wet; Multiple Disc
Ignition system	TCI
Starter system	Electric
Transmission system	Constant Mesh; 5-speed
Final transmission	Chain
Fuel system	Fuel Injection

## Chassis

Frame	Aluminium Bilateral Beam
Front suspension system	Upside-down telescopic fork
Front travel	310 mm
Rear suspension system	link suspension; Swingarm
Rear travel	315 mm
Front brake	Hydraulic Single Disc, Ø270 mm
Rear brake	Hydraulic Single Disc, Ø240 mm
Front tyre	80/100-21 51M Tube type
Rear tyre	120/80-19 63M Tube type
Caster angle	26°55
Trail	120 mm

## Dimensions

Overall length	2,180 mm
Overall width	825 mm
Overall height	1,275 mm
Seat height	965 mm
Wheel base	1,480 mm
Minimum ground clearance	350 mm
Wet weight (including full oil and fuel tank)	109 kg
Fuel tank capacity	6.2 L
Oil tank capacity	1.2 L



# YZ450F

Always wear a helmet, eye protection and protective clothing. Yamaha encourage you to ride safely and respect fellow riders and the environment. Images shown depict professional riders performing under controlled conditions. Specifications and appearance of Yamaha products as shown here are subject to change without notice and may vary according to requirements and conditions. For further details, please consult your Yamaha dealer.