

Tune in to victory.

Yamaha has been building winning motocross bikes for five decades. During this time the MX world has seen the rapid development of new technologies that have transformed the sport. And the YZ450F's Power Tuner app enables you to connect to your bike and fine-tune the engine settings to suit your riding style or track conditions – taking your motocross experience to the next level.

It's so easy to use your smartphone to connect with the bike's ECU and pre-programme the YZ450F with a range of different engine maps. Which means that you can instantly select the best fueling and ignition set up to maximize your winning potential in different riding conditions.

Featuring a high-tech reversed-head electric-start engine producing an enormous spread of torque-rich performance – together with a sharp-handling lightweight aluminium bilateral beam frame equipped with one of the best suspension packages in the industry – the YZ450F is a born winner.



- Ultra-compact 450cc engine: power with control
- Light and compact rearward-slanted cylinder
- Yamaha Power Tuner app for instant track-side tuning
- Handlebar switch for easily adjustable mapping
- Compact electric starter with ultra-light battery
- Launch Control System for quicker, smoother starts
- Advanced fuel injection system for optimum power
- Angled radiators ensure effective engine cooling
- Robust transmission for positive shifting
- Compact mass-centralized wraparound exhaust
- Lightweight aluminium frame for agile handling



Tune in to victory.

With its low weight, outstanding power and precise handling, the YZ450F delivers the technology and performance needed to take you into the victorYZone. Making this bike the clear choice for every racer who wants to discover their true winning potential.

The compact engine comes with a lightweight rearward slanted cylinder that maximizes the performance of the high compression head, forged piston and aggressive camshaft profiles. And using the Power Tuner app on your smartphone you can make instant trackside mapping adjustments and tune the engine power characteristics to gain a real advantage in all riding conditions.

Its lightweight aluminium bilateral frame has been designed to give an idealized balance of rigidity for precise handling and agile cornering – while the industry-leading coil spring-type forks and linkage rear suspension deliver exceptional balance.







Ultra-compact 450cc engine

Equipped with a high compression cylinder head as well as a durable forged piston and aggressive camshaft profiles, the compact 450cc engine gives you the best balance of race-winning performance together with ultimate controllability. Delivering torque-rich power right where you need it, the 2021 YZ450F has the ability to take you to the top.



Lightweight rearward-slanted cylinder

The YZ450F's light and compact rearwardslanted cylinder is positioned in the chassis to ensure excellent mass centralization. Together with the highefficiency reversed cylinder head as well as the long and straight inlet and a high compression piston, this sophisticated design gives you race winning performance in all conditions.



Yamaha Power Tuner app

Simply download the free app to your smartphone, and using wireless connectivity you can adjust fuel/air mix and ignition timing to suit your riding style, and different tracks and conditions. What's more, this innovative system also lets you access valuable engine running and maintenance data.



Adjustable mapping switch

Once you've selected your two preferred engine maps and preloaded them for your riding session using the Power Tuner app you can select your preferred mapping using the handlebar-mounted switch. This on-the-fly adjustment means you can instantly change from one personalized map to another, on the side of the track for quick adjustment, giving you ultimate control in all conditions.



Launch Control System

The YZ450F's Launch Control System (LCS) optimizes the engine's power output and running characteristics during the first few seconds of the race after the gate drops. By helping to transmit power more efficiently, the LCS gives you greater controllability off the line, increasing your holeshot-winning performance every time.



Advanced fuel injection system

The compact 450cc engine is equipped with a highly advanced Mikuni® fuel injection system. Featuring a lightweight 44mm throttle body, this advanced system is fed by a high pressure electric pump that ensures optimum atomization for excellent running performance in a wide range of riding conditions.



YZ450F

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

Chassis	
Frame	Semi double cradle
Front suspension system	Upside-down telescopic fork
Front travel	310 mm
Rear suspension system	Swingarm; link suspension
Rear Travel	317 mm
Front brake	Hydraulic single disc, Ø270 mm
Rear brake	Hydraulic single disc, Ø240 mm
Front tyre	80/100-21 51M
Rear tyre	110/90-19 62M
Caster Angle	26°55
Trail	120mm

Dimensions	
Overall length	2,185 mm
Overall width	825 mm
Overall height	1,285 mm
Seat height	965 mm
Wheel base	1,485 mm
Minimum ground clearance	330 mm
Wet weight (including full oil and fuel tank)	112 kg
Fuel tank capacity	6.2litres
Oil tank capacity	0.90litres



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.