

2018

RM-Z450



- Exceptional handling from a new, lighter aluminum frame and swingarm
- Engine has improved throttle response, more mid-range torque and higher peak power
- New Showa coil spring fork & BFRC shock deliver remarkable suspension action
- Updated S-HAC and traction management systems help you take the lead
- Aggressive new styling blends rider-friendly ergonomics with Suzuki racing identity



RM-Z450 COLOR



Champion Yellow No. 2

2018

RM-Z450



Completely redesigned for 2018, the RM-Z450 wraps a sleek, race-ready appearance around a stronger engine and a nimble chassis that continues the Suzuki tradition of extraordinarily precise handling. Developed using Suzuki's RUN, TURN and STOP philosophy that creates a Winning Balance between engine and chassis performance, the 2018 RM-Z450 has stronger brakes for better stopping power, a wider spread of engine muscle with higher peak power, and a frame that is stronger and lighter, resulting in a nimble chassis that elevates the standard for cornering performance.

Enlist in the RM ARMY and enjoy Suzuki Amateur Racing Support!

Suzuki's RM Army and Amateur Racing Support is top-notch, offering over \$3.8 million in contingency, trackside support, and the opportunity to train with Ricky Carmichael at Suzuki's exclusive Camp Carmichael. Want to see why champions choose Suzuki? Visit RaceSuzuki.com for more information on Suzuki's Amateur Support Program and enlist in the RM ARMY!



RM-Z450 FEATURES

KEY NEW ADVANCEMENTS

- Increased engine performance
 - Improved throttle response with higher peak power
 - Evolved traction management system helps the bike hook up
 - Updated Suzuki Holeshoot Assist Control (S-HAC) gets you out front
- Advanced cornering performance
 - New frame and swingarm are lighter with excellent strength
 - Refined chassis dimensions blend nimble handling with stability
 - Improved coil spring fork provides great performance and easy tuning
 - New Showa BFRC rear shock delivers remarkable damping response
 - Bridgestone X30 tires bring outstanding grip
- Improved braking performance
 - Larger front brake increases stopping power and feel
 - New, compact rear master cylinder is out of the way of mud and boots
- Functional styling
 - Aggressive new styling blends function with Suzuki racing identity
 - Narrow cockpit lets rider move with ease for maximum racing performance

ENGINE FEATURES

- New 449cc liquid-cooled, 4-stroke, 4-valve DOHC engine is the latest incarnation of Suzuki's proven and reliable fuel-injected powerplant.
- The engine has higher peak horsepower with more torque at lower engine speeds for improved throttle response through the entire rev-range.
- The cylinder head intake port shape is changed to tumble flow the fuel/air mixture by 25% to help increase power output.
- A 30% larger air cleaner opening is combined with a more direct air cleaner outlet tube path to the throttle body to increase air flow.
- Advanced fuel-injection system makes for extra-smooth power delivery, high fuel efficiency, and superb reliability.
- The RM-Z450 has a new, Suzuki-unique throttle body design with a relocated fuel injector fed by a new, higher-pressure fuel pump directly sprays fuel at the butterfly valve to improve atomization of the fuel/air charge.
- The new throttle body design eliminates complex control linkage so the rider feels a more direct connection to the engine.
- The intake camshaft profile is changed, including more valve lift than the prior model, increasing power at all engine speeds.
- The compact aluminum cylinder is finished with Suzuki Composite Electrochemical Material (SCEM) coating for durability, lightweight and efficient heat transfer.
- The piston's casting is upgraded to include strengthening ribs near the wrist pin bosses to match component reliability to the higher horsepower.

- Engine starting is simple and efficient due to a long kick starter lever, refined internal gears, larger air cleaner and breather system, plus an automatic decompression system that works precisely and efficiently (eliminating the need for a heavy and costly electric start system).
- The high-flow exhaust system complies with AMA sound regulations.
- New engine protectors help guard the coolant pump (on the right) and the stator cover (on the left) from debris and stones.

ADVANCED ELECTRONICS

- The 2018 RM-Z450 features an evolved and faster traction management system. The Electronic Control Module (ECM) continually measures throttle opening, engine speed and gear position, and then adjusts the ignition timing and fuel injector duration to fine-tune the engine output to deliver the best traction for the riding conditions.
 - The RM-Z450's traction management system is different from a street-bike traction control system as it does not measure rear tire spin. Because the needs of a motocrosser are different from those of a street bike rider, this system offers constant adjustment that maximizes traction at all times.
- The Suzuki Holeshoot Assist Control (S-HAC) is a selectable launch system derived from the factory race bike to help riders' takeoff from the starting gate for an early lead. There are three modes riders can choose for the best option per their skill level and starting conditions. There are three stages to A-Mode and B-Mode of the S-HAC system. This helps riders at the moment of launch, when crossing the gate, and through acceleration to full speed. The S-HAC settings for A-Mode on the 2018 RM-Z450 are updated to aid the rider's throttle control during launches.
 - **A-Mode: For hard surfaces or slippery conditions at the starting gate.** In this mode, S-HAC alters ignition timing at the moment of launch and the ride over the gate to reduce wheel slip to deliver a smooth takeoff. It also advances ignition timing during this sequence for stronger acceleration. After 1.2 seconds or when you reach third gear, the system shuts off and returns to normal ignition timing.
 - Benefit of A-Mode: For novice riders and/or hard and slippery traction conditions, use A-Mode for a more controlled launch.
 - **B-Mode: When conditions at the starting gate have better traction, and a more aggressive launch is desired.** S-HAC will advance the ignition timing to allow increased throttle response and stronger acceleration off the line. The ignition timing alternation is in a similar sequence as A-Mode, but with increased overall timing. One of three conditions will return the ignition to normal operation (whichever happens first): after 4.5 seconds has passed since throttle opening, or when you shift to 4th gear, or when the throttle is closed.
 - Benefit of B-Mode: For skilled riders and/or good starting conditions, use B-Mode for a more aggressive launch.
 - **Base Mode: Standard power launch, no action required on the S-HAC switch.**
- Designed for motocross use, the lightweight, battery-less, electronic fuel injection system is key to the engine delivering efficient power.
- Easy-to-use Fuel Couplers are included to simplify EFI tuning.
 - For quick fuel adjustments to suit riding conditions, two couplers are provided. One is for rich and another is for lean fuel setting compared to stock setting. Riders can change fuel settings in seconds by simply connecting either coupler to the wire harness.

2018

RM-Z450



RM-Z450 FEATURES

TRANSMISSION & DRIVE FEATURES

- Refined 5-speed transmission enables precise gear shift operation. The transmission feel has been improved with a precisely machined shift cam for accurate gear selection. Specialized machining processes also increase the precision of the matching gears.
- The multi-plate, wet clutch uses rack & pinion clutch release mechanism for precise feel of the engagement and disengagement points while riding.
- The new, lighter-weight chain guide is shaped to accurately route the drive chain smoothly.

CHASSIS FEATURES

- The 2018 RM-Z450 features a new frame and swingarm design that continues Suzuki's reputation as the best handling motocrossers available.
- The new aluminum-alloy twin-spar frame combines cast and extruded sections to achieve superior front-and-rear weight distribution while balancing strength and weight.
- The new frame is 700 grams (1.32 lbs.) lighter to improve cornering performance and shock absorption while delivering stable handling.
- The new swingarm is assembled with thinner materials for 100 grams (0.25 lbs.) lower weight while cornering performance and handling stability is improved.
- The wheelbase is shorter and the frame head pipe is relocated to produce quick and nimble handling characteristics.
- New hexagonal aluminum rails are used on the sub-frame for lighter weight, a slimmer appearance and easier air-filter service.
- The sub-frame rails are moved inward to slim the bodywork, but are also raised to provide additional space for the larger air cleaner and the advanced BFRC shock absorber.
- Not only is the sub-frame thinner, but all of the body work is slim to enable the RM-Z450 rider to move freely in the cockpit, especially during spirited riding.
- Inspired by the advanced suspension from the GSX-R1000R Superbike, the RM-Z450 has a new Showa Balance Free Rear Cushion (BFRC) shock absorber.
- The BFRC uses a separate, external damping circuit that improves the responsiveness of damping force to deliver excellent traction and better absorption over bumps.
- The fully adjustable BFRC controls damping so well during fine suspension movements that ride comfort is increased at lower speeds while stability is enhanced at higher speeds.
- New-generation, improved Showa coil spring front fork has larger inner tubes and rod pipes for strength and durability. Front suspension tuning and maintenance is balanced and easy – a great benefit during frequent riding.

- Springs in each fork leg combine with larger, adjustable damping cylinders to deliver better response to the terrain and provide a strong feeling of control to the rider.
- The strong, RENTHAL aluminum-tapered handlebars have a straighter bend than prior models to help aid the rider during aggressive maneuvering.
- A new, lighter upper fork bracket is used to complement the new front suspension and handlebars.
- To improve stopping performance and feel, a larger 270 mm wave-style front brake rotor is used.
- A newly designed rear brake master cylinder hugs the frame beam to reduce dirt contamination and the chance of the rider's boot touching it during riding.
- To support the additional engine, braking and handling performance of the 2018 RM-Z450, the tires are updated to the racetrack-developed Bridgestone Battlcross X30 tires.
- The wheels feature black-anodized rims with a new cross-section design that maintains strength while reducing un-sprung weight.
- Suzuki MXGP-inspired styling has a sharper front fender and radiator shrouds blending into side covers and an upswept tail to promote the impression of speed while reducing weight and easing service.
- The functional styling and the motorcycle's trim chassis permits a variety of rider positions that facilitate control and comfort.
- A new plastic fuel tank weighs half a pound less than the prior model's aluminum tank. Fuel capacity is raised to 1.7 US gallons.
- The seat base, inner fenders, and side covers were developed to reduce moisture and dirt from getting to the air cleaner. This helps prevent debris from contaminating the air filter element.
- The new seat is slimmer, with revised foam density to aid the rider's control of the motorcycle. The seat weighs half a pound less than the prior model and has a large, blue gripper panel that runs nose-to-tail on the cover.
- The Suzuki Championship Yellow bodywork is enhanced with distinctive blue and black striping and modern logo graphics.
- See Suzuki industry leading contingency programs at www.SuzukiCycles.com/Racing.
- For more details, please visit www.suzukicycles.com.

RM-Z450 SPECS

Engine:	449cc, 4-stroke, liquid-cooled, single-cylinder, DOHC
Bore x Stroke:	96.0 x 62.1 mm (3.78 x 2.40 in.)
Compression Ratio:	12.5: 1
Fuel System:	Fuel injection, 44 mm throttle body
Starter:	Primary kick-start with automatic decompressor
Lubrication:	Semi-dry sump
Clutch:	Wet multi-plate
Transmission:	5-speed constant mesh
Final Drive:	Chain, DID 520DMA2K, 114 links
Suspension, Front:	Inverted telescopic, coil spring, oil damped, adjustable damping force
Suspension, Rear:	BFRC – link type, coil spring, oil damped, adjustable spring preload & damping force

Brake, Front:	Disc brake, single rotor
Brake, Rear:	Disc brake, single rotor
Tire, Front:	80/100-21 M/C 51M, tube type
Tire, Rear:	110/90-18 M/C 62M, tube type
Fuel Tank Capacity:	6.3 L (1.6 US gallons)
Ignition:	Electronic ignition (CDI)
Spark Plug:	NGK DIMR8C10
Overall Length:	2175 mm (85.6 in.)
Overall Width:	835 mm (32.9 in.)
Overall Height:	1260 mm (49.6 in.)
Wheelbase:	1480 mm (58.3 in.)
Ground Clearance:	330 mm (13.0 in.)
Seat Height:	960 mm (37.8 in.)
Curb Weight:	112 kg (247 lbs.)

Suzuki Motor of America, Inc., makes every effort to present the most current specifications and product features at the time of publication. Because of our policy of continual improvement, changes may be made in equipment, availability, and specifications without notice or obligation. At Suzuki, we want every ride to be safe and enjoyable. Always wear a helmet, eye protection, and protective clothing. Never ride under the influence. Inspect your Suzuki before riding. Always supervise young riders. The RM and RM-Z series motorcycles are for closed-course competition and related practices only. Take an MSF skills course. For the street course nearest you, call 1-800-446-9227. For the MSF DirtBike SchoolSM, call 1-877-288-7093. Along with concerned conservationists everywhere, Suzuki urges you to Tread Lightly![®] on public and private land. Preserve your future riding opportunities by showing respect for the environment, local laws, and the rights of others when you ride. Ask your participating dealer about Genuine Suzuki Accessories and the Suzuki Retail Finance Plan and the Suzuki Extended Protection Plan. With the Suzuki Retail Finance Plan, it's easy to afford and equip the machine that's perfect for you. VISIT SUZUKICYCLES.COM FOR MORE INFORMATION. Suzuki Motor of America, Inc., 3251 East Imperial Highway, P.O. Box 1100, Brea, CA 92822-1100. Suzuki, the "S" logo, and Suzuki model names are Suzuki trademarks or ©. © 2017 Suzuki Motor of America, Inc.