

# The Winning Balance







The Suzuki RM—Z motocross motorcycles have carried some of the worlds greatest racers to the top of the podium.

It's evidence that Suzuki's racing success lives both on the road and off. That's just part of the Winning Balance that demands motocross riders take an even closer look at Suzuki. That tradition comes from a high-performance heritage that powers all of Suzuki. The company began racing motorcycles and winning championships more than 50 years ago. With each season, Suzuki has built on its revolutionary history of racing success. That's why champions continue to choose Suzuki.



## **Championship-winning performance, ready for you**

Success on the race track requires a powerful start and strong riding performance throughout every lap. A successful race bike is more than just a strong motor, a great chassis and controlled suspension. It takes a motocross bike with the best balance of skills. It takes a Suzuki RM-Z450 and the winning balance.

The latest MX1 contender, the popular RM-Z450 is equipped with an upgraded launch control system and spring-less SFF Air Forks. Developed in conjunction with Suzuki's official World and American Motocross teams, this model has been designed and tested using feedback gained from riders including Kevin Strijbos and James Stewart.

#### Suzuki Holeshot Assist Control (S-HAC)

A selectable launch mode system derived straight from factory race bikes. S-HAC helps riders in launching from the starting gate for an early lead.

#### S-HAC;

- Changes the ignition map for quicker launch.
- Is selectable from two different modes to suit different conditions.
- Has three-stage control for more detailed control. In the moment of launch, ride over the starting gate, and acceleration, each sequence is different; which requires different engine characteristic for quicker launch. Therefore, we set different maps for each sequence.

#### **Showa SFF Air Fork**

The new Separate Function Fork (SFF)-Air Front Fork, tested and proven by factory racers, is now standard equipment on the RM-Z450. Eliminating the heavy coil spring from the right side fork, the SFF-Air fork uses air – lightweight and microadjustable – to deliver a higher level of performance.

The fork is the significantly lighter, and it delivers improved suspension performance with easier adjustability. Riders can adjust the air pressure trackside with a simple hand pump using each chamber's separate and easily accessible air valve – no need for complicated spring changes.











Champion Yellow No.2 / Solid Black (GY8)



#### Engine

The fuel-injected 449cc four-stroke powering the Suzuki RM-Z450 packs the right combination of dirt-slinging torque and arm-stretching horsepower. And for today's riders, the engine does even more, thanks to a mix of new technology and proven engineering. Suzuki made improvements and enhancements to deliver easier starting, more consistent launch off the line, and a smoother spread of torque and horsepower to make the bike more exciting to ride – and easier to ride to victory.

#### **Frame Modifications**

Several key revisions to the frame on the RM-Z450 in 2015 ensure this motocrosser will remain well known as the handling King.

Combined with the new SFF-Air Front Fork, the frame revisions give the Suzuki RM-Z450 better rough-track absorption for a more plush ride overall, while improving the bike's flexibility for more precise cornering.

#### **Excel Aluminium Rims**

Excel aluminium rims are made specifically to withstand rugged racing environments, including Supercross, outdoor Motocross and off-road conditions. The aluminium-alloy rims are designed and shaped to stay strong and to maintain their good looks.

#### **Waved Disc Rotors**

The waved shape of the brake discs are standard on the RM-Z450, designed to minimise weight. Also staying cool and clean through a day of tough racing.

#### Rich/Lean Couplers

By plugging in either of two additional fuel-setting couplers, riders can opt for a richer-than-stock or leaner-than-stock fuel setting to make the most of any riding conditions. Included with the new bike, these couplers can be easily plugged in trackside.



## An elevation of the Suzuki winning balance

In 2016 the RM-Z250 brings a host of upgrades to the MX2 class: new KYB PSF2 air forks and KYB rear shock, Suzuki Holeshot Assist Control (S-HAC), new lower weight optimised rigidity chassis and new engine with improved mid-range.

Developed in conjunction with Suzuki's official World and American motocross teams, the 2016 version sees technical updates to virtually every major component, utilising feedback gained from our factory racers.



#### **PSF2 Front Fork**

The 2016 RM-Z250 comes with PSF2 front forks; The latest version of KYB's Pneumatic Spring Fork. It weighs less than a conventional spring fork and adjusting the spring rate is as easy as pumping air. Thanks to the no-coil spring design, the damper cylinder is enlarged which results in a greater damper response and more stable damper performance. Its high/low speed compression and rebound-damping adjustments let you tailor it to any track with ease.

#### **Redesigned Main Frame**

The steering head pipe has been redesigned to be the same as the 450, the inside of the pivot parts has a new rib structure and the lower connection part has been redesigned. Due to these updates, the frame weight has been reduced by 2.5% from the previous model. All these changes were to optimise the chassis rigidity while reducing the weight, resulting in greater cornering performance.

#### **New Dunlop Tyres**

Tyres are changed from Dunlop MX51 to the latest MX52 series. MX52 series are designed with CTCS (Carcass Tension Control System) technology for optimised tyre rigidity. For the rear tyre, a softer compound is used for side walls to achieve better absorption feel.



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#### **New KYB Rear Shock**

The rear shock features an integral adjuster system. This provides easy access to adjusters, rebound damping and compression damping (high and low speed) are adjustable with the integral adjuster. In accordance with the suspension change, cushion rod spacers are reshaped for better absorption feeling.









#### **Engine Performance Upgrade**

The 249cc, 4-stroke, fuel-injected, DOHC engine, with a compact and lightweight design, powers the RM-Z250's championship-winning performance. To upgrade engine performance, more than 80 engine internal parts are redesigned for the 2016 model.

#### Piston, Piston Pin and Piston Ring

The piston now has a shot-peening surface treatment for greater durability. The piston pin now has a DLC (Diamond Like Carbon) coating for less friction and greater durability. The piston ring is now an L-shaped type ring that increases sealing performance and reduces blow-by gas. All together these changes contribute to increased durability and a wider range of power.

#### Redesigned Cam Chain Tensioner/Adjuster

The cam chain tensioner is now teflon-coated to help reduce friction and increase durability. The new tensioner adjuster also provides more adjustability.

#### Redesigned Camshafts, Intake Valves

Both intake and exhaust camshafts are changed for wider range of engine performance. Intake valves are redesigned to increase compression ratio and increase intake efficiency. Compression ratio is increased from 13.5:1 to 13.75:1. These changes contribute to wider range of power and smoother power delivery.

#### Crankshaft and Magneto

The crankshaft inertia weight has reduced (crank web diameter reduced by 0.5mm) to help minimise friction from oil agitation. The magneto rotor inertia weight has also been increased to hold the balance from the reduced crank weight. These changes contribute to an overall reduced engine braking force and also freer engine running.

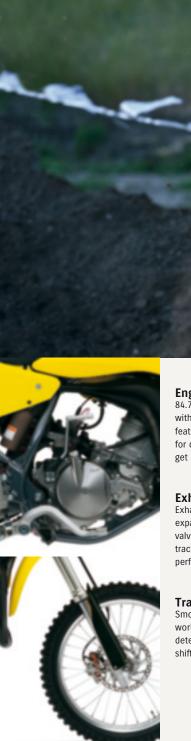


### **Racing Success Starts Here!**

The RM-85/L is powered by a liquid-cooled, SCEM-plated 84.7cc engine. This combined with an agile chassis, featuring fully adjustable inverted front forks, rear shock absorber and 17-inch front / 14-inch rear tyres (or 19-inch front / 16-inch rear tyres for the RM85L), ensures that it has what it takes to fuel the newest memories of future champions.



Champion Yellow No.2 / Solid Black (GY8)



#### Engine

84.7cc, 2-stroke, liquid cooled, crankcase reed-value engine with bore and stroke of 48.0mm x 46.8mm. The cylinder features Suzuki Composite Electrochemical Material (SCEM) for durability, weight reduction and effective heat transfer to get superior class performance.

#### **Exhaust**

Exhaust valves are made of aluminium to match the expansion rate of the cylinder, improving sealing. The exhaust valve governor and actuator have good throttle response and tractability. While digital CDI map offers good engine performance at high RPM.

#### Transmission

Smooth shifting 6-speed transmission features a fully worked-out shift mechanism, including strong shift-drum detent spring and needle bearing on the left side of the shift drum.

#### **Inverted Front Forks**

SHOWA inverted front forks are completely adjustable for rider weight, style and ability. A large-diameter fully-adjustable rear shock absorber produces plush feel with strong bottoming resistance. The front forks offer 275mm (10.8 in) and the rear 277mm (10.9 in) of wheel travel.

#### **Excellent Braking Performance**

2-piston caliper front brake with 220mm (8.7 in) large-diameter disc and rear brake with 200mm (7.9 in) disc provide excellent braking performance.

Rigid rear brake caliper with reliable braking performance, long pad life and easy maintenance. Plastic rear brake caliper guard reduces the possibility of deformation and saving weight as well. A forged aluminium-alloy rear brake pedal gives the rider accurate braking feel.



### Two for the trails

Blending race inspired looks along with an exciting entry-level off road package creates the Suzuki DR-Z125/L. Built around a time proven chassis and engine package. Inheriting sleek designs from its RM-Z brothers, the DR-Z125/L yields motocross styling that looks good at the local track or a favourite trail.





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124cc, 4-stroke, air-cooled engine produces just the right amount of strong low-to-mid range power that can be easily handled.

#### Transmission

5-speed transmission with link-type gear shifting system is built for highly reliable operation along with superb feel.

#### Frame

Lightweight, high rigidity steel pipe frame and rear swingarm are designed specifically to create a compact, fully-sized off road machine.

#### **Forks**

Telescopic front forks and link-type rear suspension provide long wheel travel and smooth, progressive action for enhancing enjoyable, comfortable ride.

#### **Rear Shock**

Rear shock absorber spring preload is fully adjustable, allowing riders to make various settings under a wide range of riding conditions.

#### **Skid Plate**

Lightweight plastic skid plate helps protecting the bottom of engine.

#### Rims

Lightweight aluminium rims contribute to the reduction in the unsprung weight.

#### **Styling**

Race inspired styling inherited from its big brothers the RM-Z250 and RM-Z450.

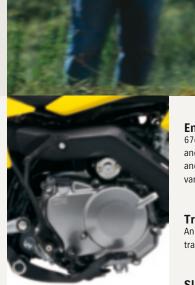
## Laying the foundation of riding fun

Torque-packed, electric-starting 67cc 4-stroke engine and super-cool race-style looks. An easy and fun choice for children to learn the fundamentals of riding. With a perfectly sized engine and chassis, the user-friendly DR-Z70 is ready for many enjoyable years down the road.





Champion Yellow No.2 / Solid Black



#### Engine

67cc, air-cooled, 4-stroke two-valve engine – perfectly sized and packed with torque. Combination of 67cc engine power and 10-inch front wheel makes for ample tractable power on various terrain.

#### Transmission

An automatic clutch and a smooth-shifting 3-speed transmission puts the fun-riding power to the terrain.

#### Sleek, Super-cool Race Style

Inherited from it's RM-Z big brothers and adorned in Championship Yellow and Black.

#### **User-friendly**

Push-button electric starter and traditional kick starter – a convenient dual starting system offering flexibility when teaching the basics. The starter lever is conveniently located on the handlebars for easy accessibility. Chassis designed for user-friendly dimensions and to realise a lightweight electric-starter-equipped machine. Ideally sized with a 560mm (22.0 in) seat height for beginners and skilled riders.

**DR-Z70** 



Model	Engine Type	Engine Displacement	Transmission	Ground Clearance	Seat Height	Kerb Mass	Suspension		Brakes		Tyres		Fuel Teels Conneits
							Front	Rear	Front	Rear	Front	Rear	Fuel Tank Capacity
RM-Z450	4-stroke, liquid- cooled, DOHC	449cm³ (27.39 cu. in)	5-speed constant mesh	325mm (12.8in)	955mm (37.6in)	112.0kg (247lbs)	Inverted, telescopic, pneumatic spring, oil-damped (SHOWA SFF-AIR)	Link type, coil spring, oil damped	Disc	Disc	80/100-21 51M, tube type	110/90-19 62M, tube type	6.2 L (1.3 G)
RM-Z250	4-stroke, liquid- cooled, DOHC	249cm³ (15.19 cu. in)	5-speed constant mesh	345mm (13.6in)	955mm (37.6in)	106.0kg (234lbs)	Inverted, telescopic, pneumatic spring, oil-damped (KYB PSF2)	Link type, coil spring, oil damped	Disc	Disc	80/100-21 51M, tube type	110/90-19 57M, tube type	6.5 L (1.4 G)
DR-Z125	4-stroke, air-cooled, SOHC	124cm³ (7.56 cu. in)	5-speed constant mesh	260mm (10.2in)	775mm (30.5in)	88.0kg (194lbs)	Telescopic, coil spring, oil-damped	Link-type, coil spring, oil-damped	Drum	Drum	70/100-17 40M, tube type	90/100-14 49M, tube type	4.8 L (1.1 G)
DR-Z125L	4-stroke, air-cooled, SOHC	124cm³ (7.56 cu. in)	5-speed constant mesh	290mm (11.4in)	805mm (31.7in)	89.0kg (196lbs)	Telescopic, coil spring, oil-damped	Link-type, coil spring, oil-damped	Disc	Drum	70/100-19 42M, tube type	90/100-16 52M, tube type	4.8 L (1.1 G)
RM85	2-stroke, liquid- cooled	84.7cm³ (5.16 cu. in)	6-speed constant mesh	325mm (12.8in)	850mm (33.5in)	73.0kg (161lbs)	Inverted, telescopic, coil spring, oil damped	Link-type, coil spring, oil-damped	Disc	Disc	70/100-17 40M, tube type	90/100-14 49M, tube type	5.0 L (1.1 G)
RM85L	2-stroke, liquid- cooled	84.7cm³ (5.16 cu. in)	6-speed constant mesh	355mm (14.0in)	875mm (34.4in)	74kg (163lbs)	Inverted, telescopic, coil spring, oil damped	Link-type, coil spring, oil-damped	Disc	Disc	70/100-19 42M, tube type	90/100-16 52M, tube type	5.0 L (1.1 G)
DR-Z70	4-stroke, air-cooled, SOHC	67cm³ (4.08 cu. in)	3-speed constant mesh, semi-automatic	135mm (5.3in)	560mm (22in)	55.0kg (121lbs)	Inverted, Telescopic, coil spring	Swingarm type, coil spring, oil damped	Drum	Drum	2.50-10 33J, tube type	2.50-10 33J, tube type	3.0 L (0.7 G)

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- Always wear a helmet, eye protection and protective clothing.
- · Read your Owner's Manual carefully.
- · Enjoy riding safely.
- Never ride under the influence of alcohol or other drugs.

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