

NEW PRODUCT

CYLINDER KIT Ø 83 mm 290 cc

SUZUKI RMZ 250 2019/2021



PART NUMBER:
P400510100031

- INCLUDED IN THE KIT:**
- Cylinder
 - Piston kit
 - Gasket kit

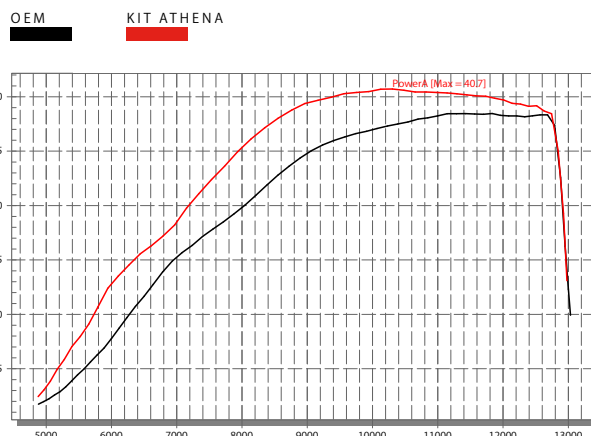
Athena unveils the new Big Bore cylinder kit developed for Suzuki RMZ 250 2019/2021.

This kit ensures an outbreak of performance thanks to the highest quality components included in the kit and to the expertise of Athena R&D department. Performance upgrade compared to OE kit is clear and consistent both at low and high revs, as demonstrated by the tests carried out by Athena's technicians. The kit was tested first on the dynamometer bench under progressive stress conditions, and subsequently on the track to certify the increase in power and maximum torque compared to the OEM kit even in the most extreme conditions. All the kit components are designed and developed by Athena to withstand the highest temperatures, pressures and stresses, and to be perfectly replaceable with the originals: a big bore aluminum cylinder with nickel coating, a forged piston with hardening and anti-seizing treatment, and a gasket kit produced with state-of-the-art manufacturing processes. This kit can be installed without any crankcase machining.

TECHNICAL DATA

	OEM	KIT ATHENA*
DISPLACEMENT	249,6 cm3	290 cm3
BORE	77,0 mm	83,0 mm
STROKE	53,6 mm	53,6 mm
COMPRESSION RATIO	13,75 : 1	13,5 : 1
MAX. POWER MEASURED	38,5 CV 11800 RPM	40,7 CV 10200 RPM

* Data referred to a bike with a stock setting engine + Athena cylinder kit



MAIN FEATURES

The new Suzuki RMZ cylinder kit ensures **better smoothness, reduced noise, longer life and increased power and torque** thanks to:

ALUMINUM CYLINDER

The new big bore cylinder was engineered by Athena's technicians to ensure an **increase in power (over 2 horsepower)** and in **maximum torque**. This cylinder ensures **better pick-up** and allows to take **full advantage of the engine even at low revs**. Athena R&D department designed, **prototyped, and tested the new cylinder** by modifying not only the diameter, but also the cam chain tensioner gasket. The revision was necessary since Suzuki changed the size of the tensioner on all Suzuki RMZ 250 from 2019 up. Produced by **gravity casting** and undergone a **heat treatment to improve the mechanical characteristics** of the aluminum alloy, this cylinder ensures **maximum resistance** even at the highest temperatures. The liner is designed to ensure **maximum smoothness** over time thanks to a special coating in nickel and silicon carbides.



ATHENA GASKET KIT

The gaskets included in the kit are all the one required to overhaul the top end of the engine. The kit also contains the cam chain tensioner gasket: redesigned by Athena's technicians and made of NBR coated steel, this gasket guarantees **maximum tightness** and **avoids oil leaks** that would compromise engine performance. The base and the head gaskets are produced in rubber-coated materials with embossments towards the combustion chamber and around the coolant liquid passages. The MLS head gasket, which undergoes extreme thermal and mechanical stress, is made of three AISI301 stainless steel layers to **prevent leakage** and **withstand high levels of compression**.



FORGED PISTON WITH SELF-LUBRICATING AND ANTI-GRIPPING COATING

Made by reverse extrusion with cutting-edge technologies, this **forged piston** is produced with quality materials that ensure **reliability equal to the OE one** and, at the same time, **greater durability**, and **better performance**. The skirt is treated with a **molybdenum disulfide coating** applied by screen printing which further **reduce friction**, while the perfectly smooth profiles ensure a **perfect flame propagation**. The **rings are produced in Japan** with wear-resistant coatings to increase the retain and the maximum performance, while the **piston pin** is made of steel alloy, and it is processed to obtain **maximum hardness and smoothness**.



SPARE PARTS

PART NUMBER	DESCRIPTION
P400510160031	GASKET KIT
S5F08300005A	FORGED PISTON Ø 82,95 mm
S5F08300005B	FORGED PISTON Ø 82,96 mm
S41316133	PISTON RING KIT

The complete application list is available on athena.eu