

KAW-POW! STARTLING NEW 2019 KX450

MOTOCROSS

**KAWASAKI KX450
FIGHTS BACK
AGAINST
KTM**

ACTION **SEPTEMBER 2018**
MAGAZINE

CCC
02970

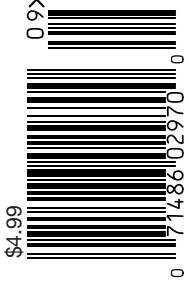


**2019 KTM
350SXF
BEST BIKE
EVER...
AND WE'RE
NOT KIDDING!**

**2019 YAMAHA
YZ250F**
• ALL NEW
• ELECTRIC START
• BIG CLUTCH
• NEW FRAME
• SKINNY TANK



**CHAD REED:
TRUE CONFESSIONS
OF A CHAMPION**



MIND-BENDING

2018 TM MX300 PROJECT BIKE





THE GEAR

Jersey: FXR Mission Air
Pants: FXR Mission Air
Helmet: 6D ATR-2
Goggles: Viral Brand Factory Series
Boots: Alpinestars Tech 5

It's hard not to judge a book by its cover, especially when its cover's flaws have been overlooked for years. Many manufacturers stick their heads in the sand when faced with criticism of their bikes. And the longer they disregard public opinion,

the more they develop a reputation that damages their product. When a manufacturer dismisses or ignores criticism, the flaws become part of the bike's DNA.

Remember when James Stewart raced YZ450Fs and fell down in every

corner at almost every race. The critics said that the bike was to blame—even though the bike had won many times before. The "Stewart Effect" ruined the YZ450F's reputation. Eventually, Stewart moved to Suzuki and crashed twice as often—leading most people

to realize that the common factor was Stewart, not the machine.

Remember when KTMs came with single-sided, no-link rear PDS rear suspension? It was lambasted by almost every KTM factory rider and MXA test, but KTM refused to give up on

it—and, in KTM's defense, it could be made to work very well with a stiffer straight-rate shock spring and new valving. But the boo-birds would never let up on the downsides of KTM's PDS—even though it was 5 pounds lighter than a linkage shock, easier to

work on and cheaper to build. Then, when KTM changed to a linkage rear shock, its fortunes changed in the American marketplace. Not because its linkage suspension was so much better, but because it catered to public opinion.



The TM MX300 engine had a 250cc powerband with 300cc power.



An Ohlins TTX shock was used instead of the production TM shock body.



Faster USA hubs laced with Excel rims.

2018 TM MX300

Remember when Italian boutique brand TM was thought to produce exotic bikes that were too tall, had super stiff suspension, ape hanger handlebars and a quirky feel? Oh, wait. You don't have to remember back very far, because up until a year ago, that was the standard party line about TMs. *MXA* is as guilty as anyone, probably guiltier because we have tested more TM motocross bikes than anyone in America—and we always said they were too tall, too stiff and too uncomfortable—because it was true. We single handedly created the negative image of TM bikes, pointing out that two-strokes were the only good thing being produced out of the small TM plant in Pesaro, Italy.

Well, now we take it back! Oh, we don't take back the bad things we said about TMs over the last decade, but we take back the negative impression that imprinted in racers' brains about the TMs of today. We have seen the error of our ways, because TM USA has seen the error of its ways. This was brought home to us when Ralf Schmidt, the American TM importer, brought out an ultra-trick 2017 TM MX300 two-stroke project bike. It looked great and sounded even better; however, the hard-line *MXA* test riders, the ones with the most TM experience, didn't want to ride it. Our stereotype of the brand got in the way. So, we had one of our rookie test riders take it out for the first shakedown cruise. He had never ridden a TM and obviously had never read a TM test, because he came back with a big grin on his face. He said, "This is one of the best-handling, fastest bikes I have ever ridden. The suspension was super plush, just a bit on the soft side." The regular *MXA* test riders looked at each other and said, "Well, he'll never make it as a test rider if he can't tell a good bike from a bad one."

We judged the book by its cover, but we didn't realize the book itself had been rewritten. What we didn't understand was that Ralf wasn't Italian. He wasn't invested in the old-world Italian way of building bikes. Ralf had learned what the American market wanted and made the 2017 TM MX300 bike to fit the mold. Ralf had fixed the flaws. He spec'ed better shock springs, fixed the terrible forks (which were paradoxically Kayaba SSS forks), lowered the chassis, and mounted handlebars that didn't look like they came from a Texas longhorn.

This was the first TM that didn't feel like the image we had created in our minds.

Now, a year later, we have tested the 2018 and 2019 TMs, and although black thoughts creep up on us at first glance, we have just as big a grin on our faces as that rookie test rider had back in 2017 when we come off the track. For us and for Ralf, the next logical step was to take the much-improved 2018 TM MX300 and build another project bike—sort of a look into the future of what Ralf sees for TM.

A GLIMPSE INTO TM'S FUTURE

Ralf outdid himself with the 2018 TM MX300 project bike. The bike has more bling, a multi-color fork coating that we have never seen before and more carbon fiber than the year prior. The bike has been customized into the ultimate race bike (although at first we were unsure about Ralf's choice of running an 18-inch rear wheel). Some *MXA* test riders were still leery of riding the TM (it is hard not to harbor bias against a brand that has tried to kill you in the past), but ultimately every test rider raved about Ralf's MX300 project bike.

Ralf left no stone unturned with this bike. A low Renthal 999 bend was a big step in the right direction. A Brembo front master cylinder was used instead of the stock Nissin unit for a firmer feel at the lever. Brembo's 9mm clutch master cylinder piston (instead of a 10mm) and a steel-braided Galfer clutch line totally eliminated any delays in braking action, plus the pull was softer at the lever. It didn't hurt that Ralf bolted up a 280mm Galfer Tsunami front rotor (for a KTM) to replace the stock TM 270mm rotor. We have always been amused by TM's idea of using nine sprocket bolts instead of six. Ralf got a set of Faster USA wheels with a six-bolt pattern to make us happy—and we were.

For added performance, only a handful of things were done. Internally, a two-ring ProX piston was used instead of one ring to improve bottom-to-mid-range grunt. Plus, the two rings extend the life of the piston rings and the life of the piston. Externally, a custom VHM cylinder head was used that allowed the tuner to change the head volume, squish band angle and compression ratio to improve power delivery. The final engine touches were a Pro Circuit pipe and some VP Racing C-12 race gas.

The Kayaba forks were works of art. They were done by Philipp Maassen at GPM Performance in Germany. Philipp, who comes to SoCal to race and test with Ralf, used a special coat-



A Pro Circuit pipe and VHM cylinder head were used on the project.



The frame and swingarm were powder-coated black.



GPM Performance worked their magic on the Kayaba forks.



2018 TM MX300

ing on the fork legs to reduce friction and installed his Pro A-Kit package internally. The Ohlins shock was tailored to Philipp's fork settings.

Initially, we had some jetting issues. Once those were ironed out, our testers were happy as clams. All the small details that Ralf put into the bike made a big difference. The clutch was super smooth and easy to pull. The brakes were incredibly powerful yet easy to control. The engine's powerband felt like a mix of a long-breadth 250cc and a big-bore 300cc. It had powerful bottom to mid but still had enough top-end over-rev to wind out the gears. It had power that was in the right places at the right times.

Our favorite part of the TM MX300 was its ultra-plush suspension com-

ponents. GPM Performance made the Kayaba forks and Ohlins shock work in tune with each other. The rough Glen Helen chop was absorbed with minimal feedback. Our grip on the TM MX300 was light on the bars, and the suspension did all the hard work. We found a balance from front to rear at 108mm of sag. The MX300's rear didn't have the typical stinkbug feel. Our testers' grins were the biggest we have seen from riders stepping off a TM motocross bike.

Ralf wants to alter the TM stereotype in America. With each project he builds and each change he gets the factory to make to the production bikes, he alters our perception more and more. We can't wait for TM to adopt some of Ralf's ideas for the 2020 models. □

TM MX300 SUPPLIER LIST

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